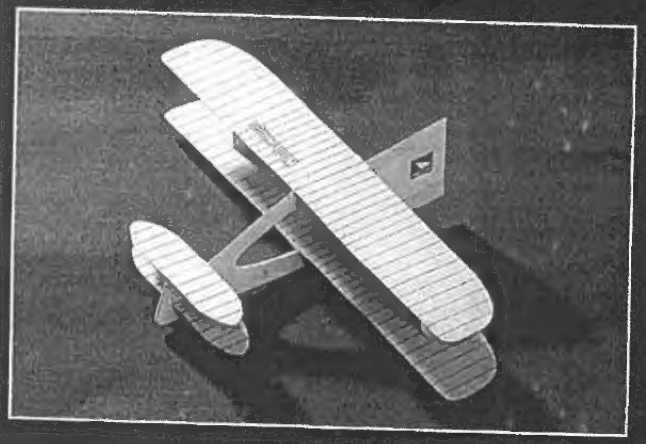
Eddie Bauer®

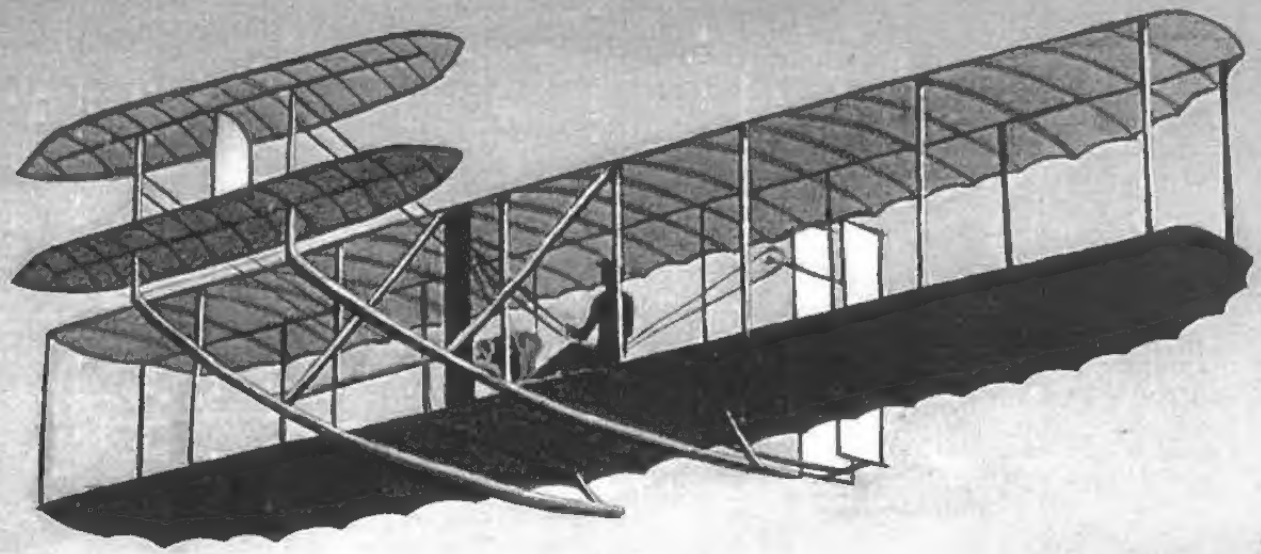
HISTORY OF FLIGHT

by Whitewings

Designed by Dr. Y. Ninomiya

15 EXCELLENT PAPER AIRPLANES





Eddie Bauer®

HISTORY OF FLIGHT

Whitewings

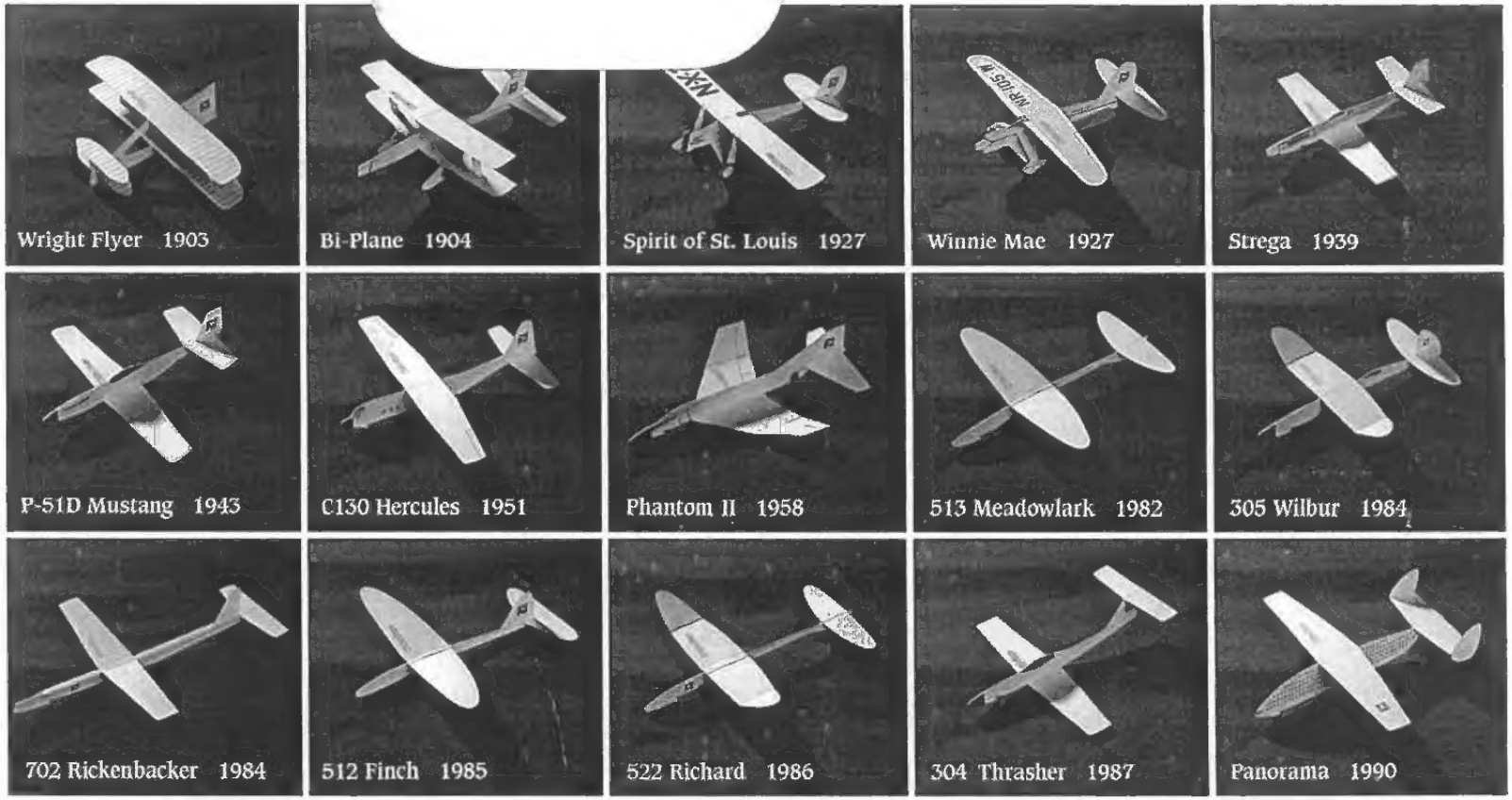
15 EXCELLENT PAPER AIRPLANES

ASSEMBLY KIT INCLUDES:
15 paper patterns, ready to cut and assemble
Instruction booklet with step by step assembly, flight and design instructions
Rubber band
Catapult
All necessary parts (glue not included)

FLIGHT SAFETY
Remember to launch planes in a large area, away from people and passing cars.

OUR GUARANTEE
Every item we sell will give you complete satisfaction or you may return it for a full refund.

ITEM NO. 22321



Made exclusively for Eddie Bauer by AG Industry Co. Ltd. Osaka, Japan. Design patent pending. Printed in Japan.

Whitewings®

ASSEMBLY INSTRUCTIONS

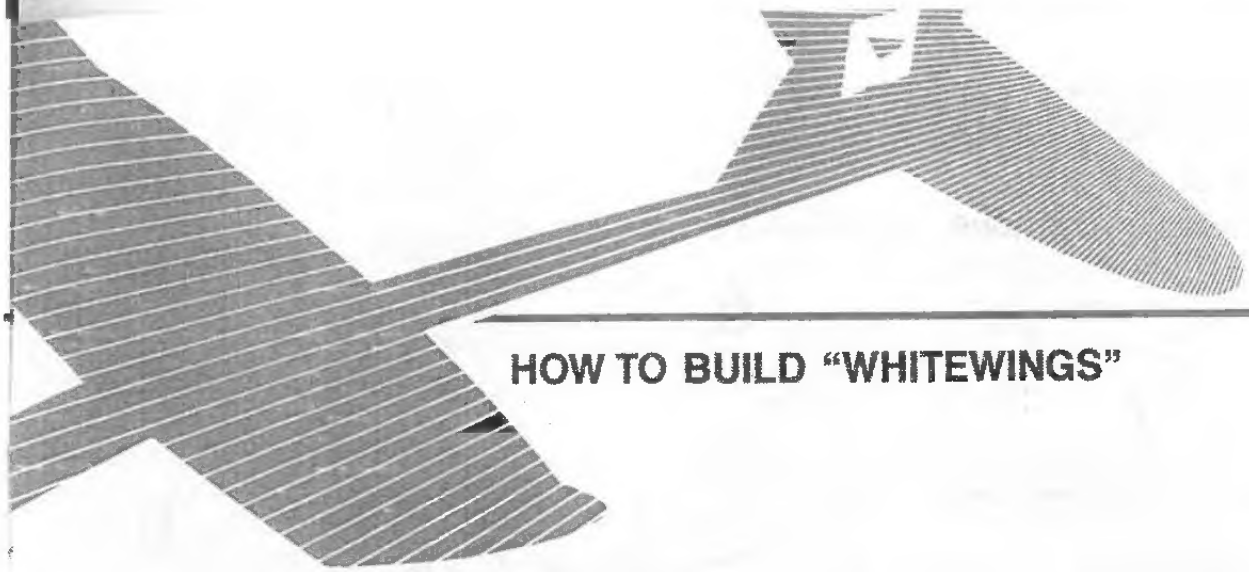
FLIGHT INSTRUCTIONS

GUIDELINE FOR WHITEWINGS COMPETITION

INTRODUCTION TO PAPER PLANE DESIGN

HOW TO BUILD "WHITEWINGS"

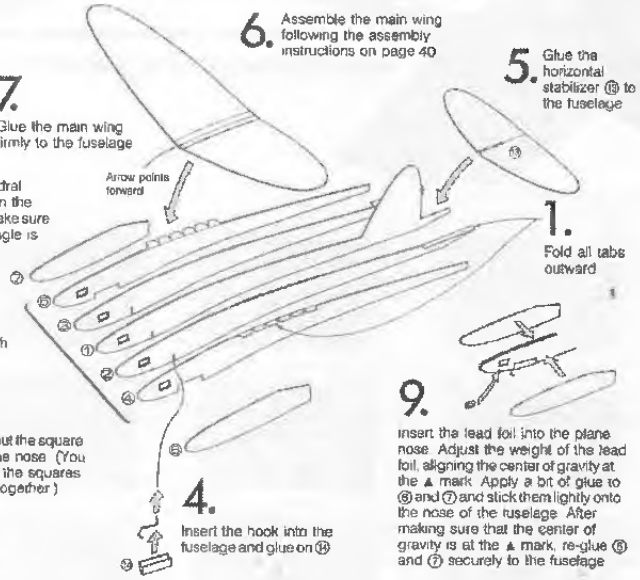
Eddie Bauer®

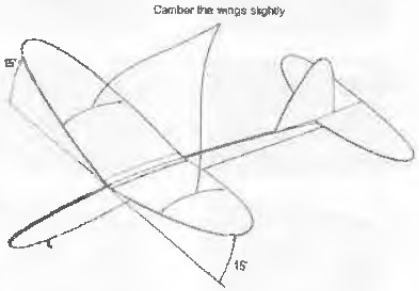


HOW TO BUILD "WHITEWINGS"

Whitewings
Racer 512 Finch

GLUING INSTRUCTIONS Glue the parts together in the order indicated.





FINISHING TOUCHES

- Give finishing touches to the plane after it dries thoroughly

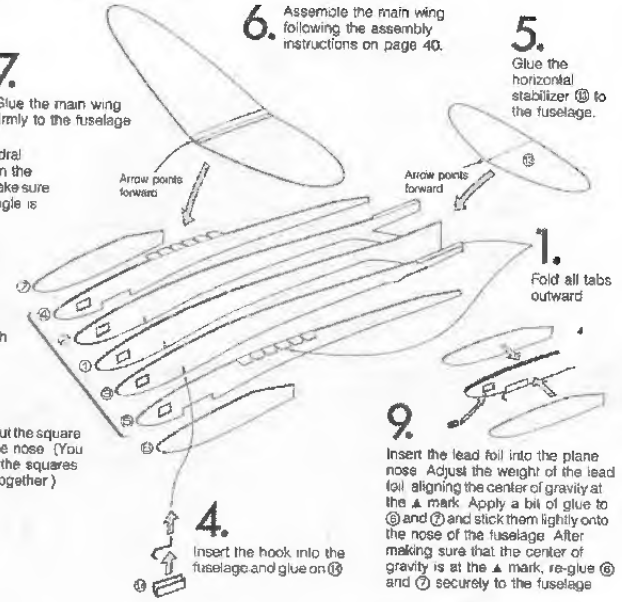
10. Camber the main wings carefully with your fingers
11. View the plane from both the front and the back and straighten any warps or bends in the fuselage and wings.

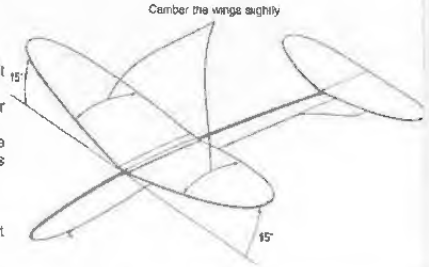
TEST FLIGHT

- Test fly the plane according to Test Flight instructions on pages 11 to 13.

Whitewings
Racer 513 Meadowlark

GLUING INSTRUCTIONS
Glue the parts together in the order indicated.





FINISHING TOUCHES

- Give finishing touches to the plane after it dries thoroughly

10. Camber the main wings carefully with your fingers
11. View the plane from both the front and the back and straighten any warps or bends in the fuselage and wings

TEST FLIGHT

- Test fly the plane according to Test Flight instructions on pages 11 to 13

Whitewings

Racer 522 RICHARD

Richard Ira Bong (1920–1945)
Though his career was short-lived, Richard soon established himself as a squadron leader and an ace flyer during World War II. He was awarded the Medal of Honor for his efforts during the war and is remembered for his gallantry.

GLUING INSTRUCTIONS

Glue the parts together in the order indicated.

4.

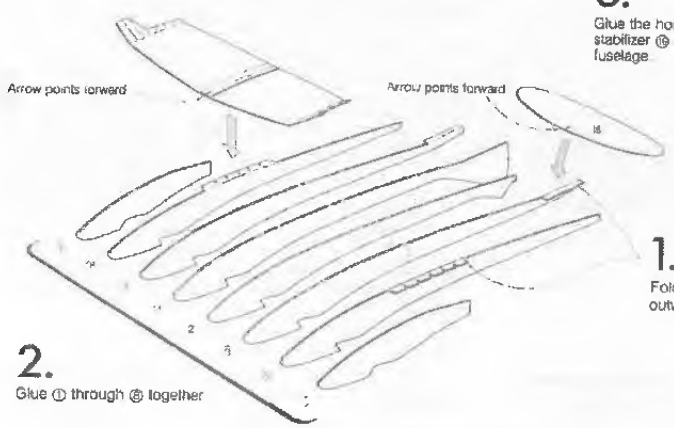
Assemble the middle part of the wing with ⑨, ⑩, ⑪, ⑫ and ⑬ following the assembly instructions 0, 1, ...7. on page 40, starting with step 0. The dihedral angle, however, must be 5°. Be careful as the part numbers for the main wing are different from those listed on page 40.

5.

Glue the middle part of the main wing firmly to the fuselage.

3.

Glue the horizontal stabilizer ⑯ to the fuselage.



1.

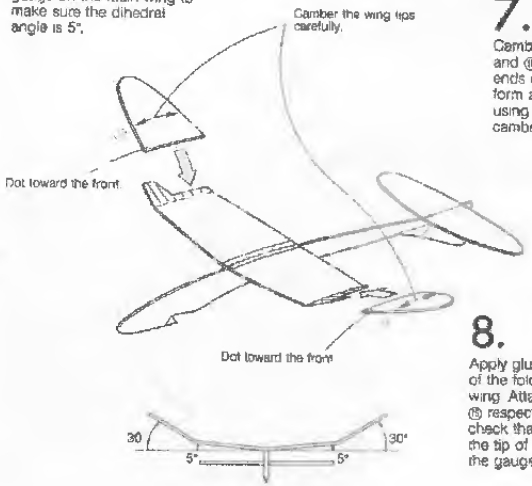
Fold all tabs outward.

2.

Glue ① through ⑧ together.

6.

Place the dihedral angle gauge on the main wing to make sure the dihedral angle is 5°.

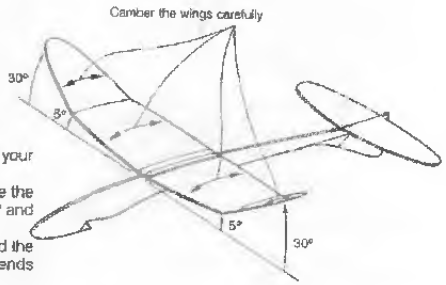


7.

Camber both wing tips ⑭ and ⑮. Fold tabs on both ends of the main wing to form a 30° dihedral angle using the gauge and then camber them as well.

8.

Apply glue to the top surface of the folded tabs of the main wing. Attach wing tips ⑭ and ⑮ respectively. Once again, check that the dihedral angle at the tip of the wing is 30°, using the gauge.



FINISHING TOUCHES

- Give the finishing touches to the plane after it dries thoroughly.

9. Camber the main wings carefully with your fingers.
10. Using the dihedral angle gauge insure the dihedral angle for the main wing is 5° and for the wing tips 30°.
11. View the plane from both the front and the back and straighten any warps or bends in the fuselage and the wings.

TEST FLIGHT

- Test fly the plane according to the Test Flight instructions on pages 11 to 13.

Whitewings

ASSEMBLY INSTRUCTIONS FOR THE MOST WINGS

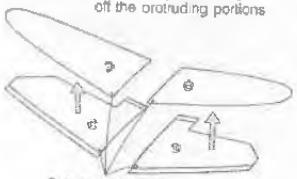
The racer type planes in this kit have a high performance main wing featuring a uniform camber along the length of the wing. Because the shape of the central part of the wing resembles a so-called saddle shaped surface in math, I call this type of wing a MOST (Modified Saddle Type) wing. It is constructed as follows.

CAUTION 1
The parts numbers used below are for the Racer 512 and 513. As the part numbers and dihedral angle may change according to the model, be careful when you use these instructions for other models.

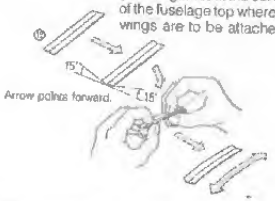
CAUTION 2
When constructing the Racer 522 start with step 0.

■ Glue the parts together in the order indicated.

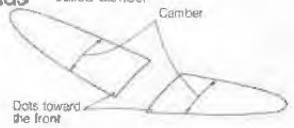
1. Glue parts ⑨ and ⑪ to the undersides of parts ⑧ and ⑩ respectively. When dry, cut off the protruding portions.



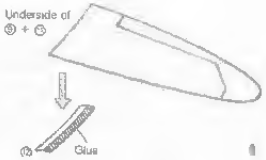
2. Using a ruler along the center line, fold part ⑫ from the center line to make a 15° angle on both sides. Then curve it carefully with your fingers to fit the curved edge of the fuselage top where the main wings are to be attached.



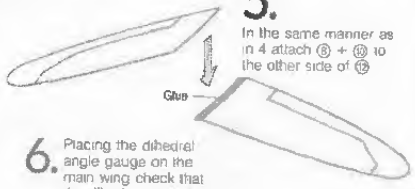
3. Curve the main wings, ⑧ + ⑨ and ⑩ + ⑪ respectively, in the manner shown in the figure on page 9. This curve is called camber.



4. Apply glue on half of the underside of ⑫ and glue onto ⑧ + ⑩. (The arrow should point toward the dot.)

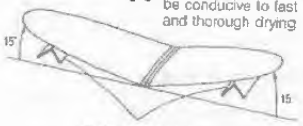


5. In the same manner as in 4 attach ⑧ + ⑨ to the other side of ⑫.



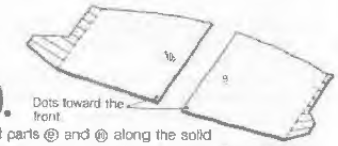
6. Placing the dihedral angle gauge on the main wing check that the dihedral angle is 15°.

7. Putting folded stands under the main wing will be conducive to fast and thorough drying.



Folded paper stands

0. Cut parts ⑧ and ⑨ along the solid lines up to the dashed lines. Then placing a ruler along the dashed line, bend the resulting strips slightly upward.

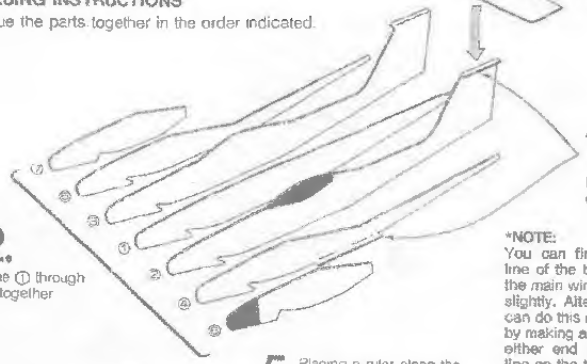


Whitewings

Light Plane 304 Thrasher

GLUING INSTRUCTIONS

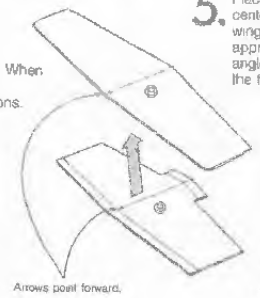
Glue the parts together in the order indicated.



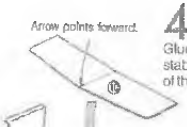
1. Fold all tabs outward.

2. Glue ① through ⑦ together.

3. Glue ⑨ to the underside of ⑧. When dry, cut off the protruding portions.

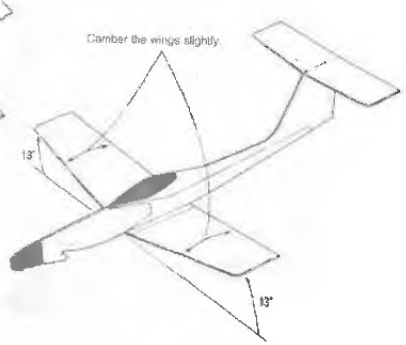


4. Glue the horizontal stabilizer ⑩ to the top of the vertical stabilizer.



5. Placing a ruler along the center line of the main wing, make an approximately 13° dihedral angle and glue it firmly to the fuselage.*

***NOTE:**
You can find the center line of the bottom side of the main wing by folding it slightly. Alternatively, you can do this more precisely by making a pinhole at the either end of the center line on the top side of the main wing and then using the pinholes to draw the center line on the bottom side.



FINISHING TOUCHES

- Give finishing touches to the plane after it dries thoroughly.

6. Camber the main wings slightly with your fingers.
7. Using the dihedral angle gauge make sure the dihedral angle is 13°.
8. View the plane from both the front and the back and straighten any warps or bends in the fuselage and wings.

TEST FLIGHT

- Test fly the plane according to Test Flight instructions on pages 11 to 13.

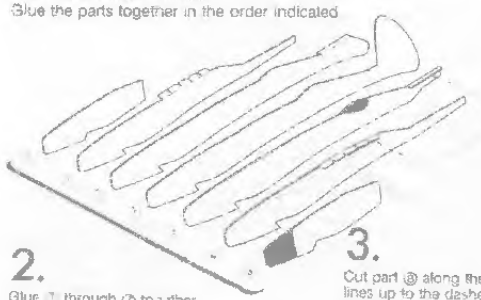
Whitewings

Light Plane 305 WILBUR

Wilbur Wright (1867–1912)
The pioneer of American aviation experimented with kites and gliders before engineering the first successful flight of a motor powered airplane. He was posthumously elected, as was brother Orville, to the American Hall of Fame

GLUING INSTRUCTIONS

Glue the parts together in the order indicated



1. Fold all tabs outward

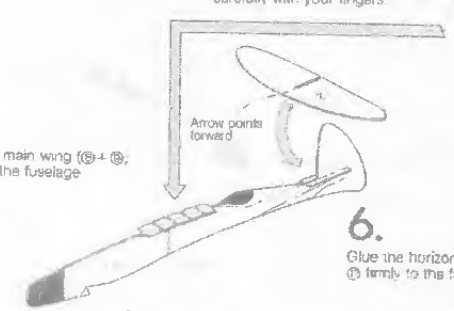
2. Glue ① through ⑦ together

3. Cut part ⑧ along the solid lines up to the dashed lines. Then placing a ruler along the dashed line, bend the resulting strips slightly upward

4. Glue ⑨ to the underside of ⑧. When dry, cut off the protruding portions

Arrows point forward

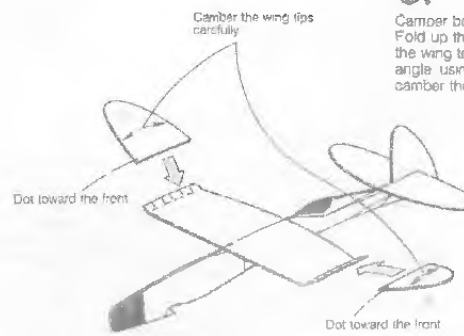
5. Camber the main wing (⑧+⑨) carefully with your fingers



Arrow points forward

7. Glue the main wing (⑧+⑨) firmly to the fuselage

6. Glue the horizontal stabilizer ⑬ firmly to the fuselage



Camber the wing tips carefully

Dot toward the front

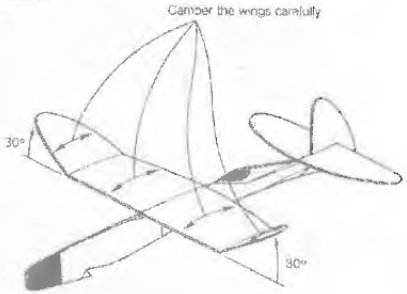
Dot toward the front

8. Camber both wing tips ⑩ and ⑪. Fold up the tabs on both ends of the wing to form a 30° dihedral angle using the gauge and then camber them as well

9. Apply glue to the top surface of the folded tabs of the main wing and attach wing tips ⑩ and ⑪ respectively. Using the dihedral angle gauge, once again, check that the dihedral angle for the wing tips are 30°

30° 30°

Camber the wings carefully



30° 30°

FINISHING TOUCHES

- Give the finishing touches to the plane after it dries thoroughly

10. Camber the main wings carefully with your fingers
11. Using the dihedral angle gauge make sure the dihedral angle for the wing tips are 30°
12. View the plane from both the front and the back and straighten any warps or bends in the fuselage and wings

TEST FLIGHT

- Test fly the plane according to the Test Flight instructions on pages 11 to 13

Whitewings

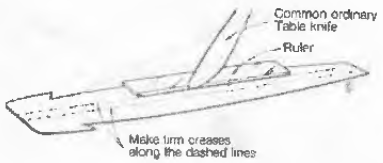
ASSEMBLY INSTRUCTIONS FOR THE TRIANGULAR LONG FUSELAGE

A truly high performance paper plane is light, sturdy, and has little air resistance or drag. This is especially true of larger paper airplanes. That is why I have spent some time researching and designing a fuselage that accomodates the body construction of a larger paper airplane. The result of these efforts was the invention of the triangular long fuselage which is resistant to bending and twisting. Its aerodynamic performance makes it worthy of the Whitewings' name.

The triangular long fuselage is resistant to both bending and twisting.

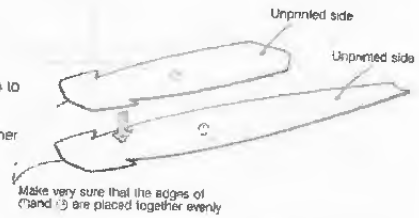
1.

Make firm creases along the dashed lines of fuselage pieces (① & ②) using a common ordinary table knife (blunt knife) and a ruler as a guide. Avoid cutting through the dashed lines.



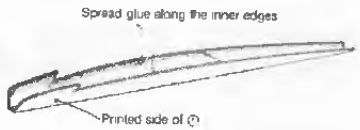
2.

Spread glue evenly over the entire surface of printed side of ②. Apply ① to the unprinted side of ②. Make very sure that the edges of ① and ② that form the plane nose are placed together evenly or flush, as shown in the diagram.



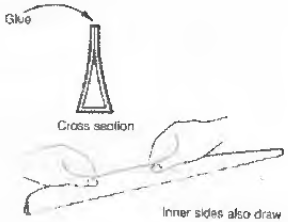
3.

Before the glue dries, fold ① and ② along the creased dashed lines having ② face inward. Then spread glue along the inner edges as shown.



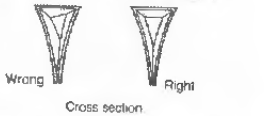
4.

Glue the inner edges together to complete the formation of the cross section as shown.



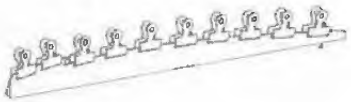
5.

View the fuselage closely from both the front and back and carefully straighten any warps or bends before the glue dries. Look inside of the fuselage to make sure the inner sides also draw no warps or bends.



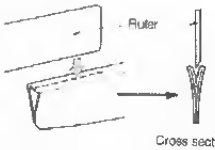
6.

Let the fuselage dry completely by attaching clips or clothespins on the glued edges as shown. It takes at least 2 hours to dry.



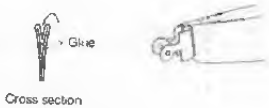
7.

Make a groove along the thick dashed line at the plane nose by carefully pressing down upon it with a ruler. The groove must be deeper at the tip of the plane nose than at any other part. The remaining area of the top of the fuselage, except for the thick dashed line, should remain flat.



8.

Put glue into the groove at the tip of the plane nose and both inner sides of the plane nose and glue together. Let it dry thoroughly (at least 2 hours) using a clip to keep the tip of the nose in place.



9.

Completed Figure

Whitewings
TriLinear 702 RICKENBACKER

Edward Vernon Rickenbacker (1890–1973)
Known as "Eddie" this American aviator's interest with machines began with automobile racing. He went on to command the 94th Aero Pursuit squadron and was awarded the Congressional Medal of Honor for his combat heroics.

GLUING INSTRUCTIONS
Glue the parts together in the order indicated.

1. Assemble the fuselage following the assembly instructions for the triangular long fuselage on pages 44 & 45.

2. Glue ④ to the underside of ③. When dry, cut off the protruding portions.

3. Glue the horizontal stabilizer ⑤ firmly to the gluing position for the horizontal stabilizer on the fuselage.

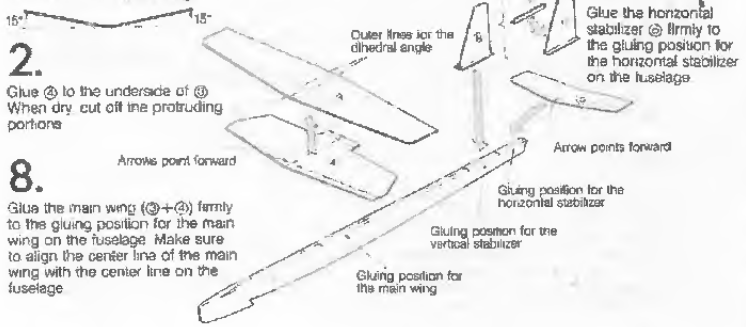
4. Fold ⑦ along the dashed line at a 90° angle and then cut off the protruding portions.

5. Fold the tab of the vertical stabilizer ⑧. Glue ⑦ to the other side of the vertical stabilizer ⑥.

6. Glue the vertical stabilizer (⑥+⑦) to the gluing position for the vertical stabilizer on the fuselage. Make sure to align the folded tab line of the vertical stabilizer with the center line on the fuselage.

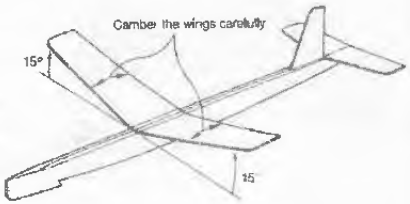
7. Place a ruler along each of the outer lines of the main wing and bend each side up individually to make a dihedral angle of approximately 15° for both sides of the main wing.

8. Glue the main wing (③+④) firmly to the gluing position for the main wing on the fuselage. Make sure to align the center line of the main wing with the center line on the fuselage.



FINISHING TOUCHES
- Give the finishing touches to the plane after it dries thoroughly.

9. Camber the main wings carefully with your fingers.
10. Using the dihedral angle gauge make sure the dihedral angle for the main wing is 15°.
11. View the plane from both the front and the back and straighten any warps or bends in the fuselage and wings.



TEST FLIGHT
- Test fly the plane according to the Test Flight instructions on pages 11 to 13.

Whitewings
P-51D MUSTANG

GLUING INSTRUCTIONS
Glue the parts together in the order indicated.

1. Fold all tabs outward.

2. Glue ① through ⑤ together. When dry, cut out the square for ballast in the nose. (You may cut out the squares before gluing together.) If you choose to attach paper clips to the plane nose instead of inserting the lead foil, glue ① through ⑦ together.

3. Glue ⑨ to the underside of ⑧. When dry, cut off the protruding portions.

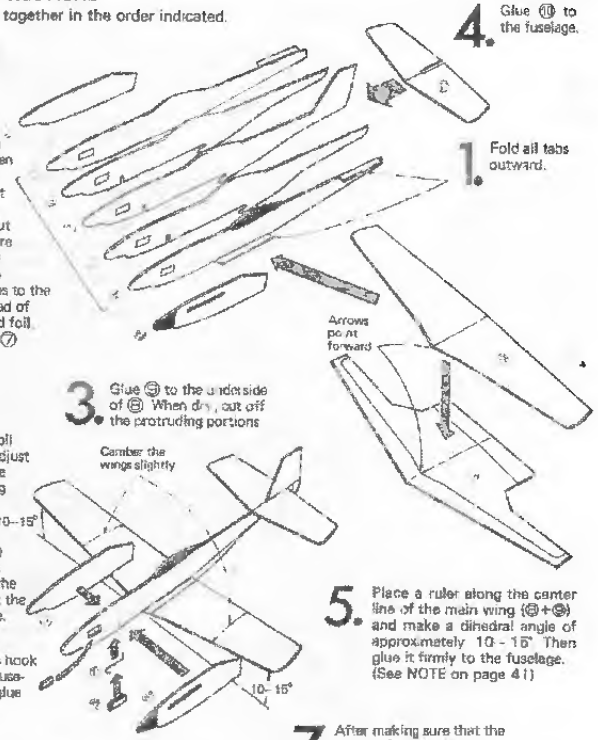
4. Glue ⑩ to the fuselage.

5. Place a ruler along the center line of the main wing (⑧+⑨) and make a dihedral angle of approximately 10 - 15°. Then glue it firmly to the fuselage. (See NOTE on page 41)

6. Insert the lead foil into the nose. Adjust the weight of the lead foil, aligning the center of gravity at the ▲ mark. Apply a bit of glue to ⑥ and ⑦ and stick them lightly to the nose. Also insert the hook in the nose.

7. After making sure that the center of gravity is at the ▲ mark, re-apply ⑥ and ⑦ securely to the fuselage.

8. Insert the hook into the fuselage and glue on ⑫.



FINISHING TOUCHES
- Give finishing touches to the plane after it dries thoroughly.

9. Camber the main wings carefully with your fingers.
10. View the plane from the front and straighten any warps or bends in the fuselage and wings.

TEST FLIGHT
- Test fly the plane according to Test Flight instructions on pages 11 to 13.

Whitewings
Bi-plane

GLUING INSTRUCTIONS

Glue the parts together in the order indicated

2. Glue ① through ⑥ together. When dry, cut out the square for balsa in the nose. (You may cut out the squares before gluing together.) If you choose to attach paper clips to the plane nose instead of inserting the lead foil, glue ① through ⑦ together.

3. Glue ⑩ to the underside of ⑨. When dry, cut off the protruding portions.

4. Glue ⑪ to the fuselage.

1. Fold all tabs outward.

5. Placing a ruler along the center line of the main wing (⑨+⑩), make an approximately 5° dihedral angle and glue it firmly to the fuselage. (See NOTE on page 41.)

Arrows point forward

9. Glue ⑳ and ㉑ together and attach them to the wing in the same way as No. 8.

7. Glue ⑮, ⑯, and ⑰ together and attach them to the lower main wing in the same way as No. 6.

Attach landing gear here

8. Glue ⑱ and ⑲ together to make a pylon and glue the bottom of the pylon to the square in the middle of the wing.

6. Glue ⑫, ⑬ and ⑭ together and attach them to the underside of the lower main wing, using the line on the wing as a guide.

Fold the protruding front part of the tab over the top of the wing and glue on.

10. Place a ruler along the center line of the upper wing, and make a dihedral angle of approximately 5°. (Do not glue the upper part of the pylons to the wing yet.) View the wings from the top, bottom, back and front and make sure they are parallel.

11. When dry, glue the top part of the pylons to the underside of ⑨.

5°

6°

Camber the wings slightly

12. Insert the lead foil into the plane nose. Adjust the weight of lead foil, aligning the center of gravity at the ▲ mark. Apply a bit of glue to ⑥ and ⑦ and stick them tightly to the nose of the fuselage. Also insert the hook in the nose.

13. After making sure that the center of gravity is at the ▲ mark, re-apply ⑥ and ⑦ securely to the fuselage.

14. Insert the hook into the fuselage and glue on ㉒.

5°

5°

FINISHING TOUCHES

- Give finishing touches to the plane after it dries thoroughly.

15. Camber the main wings carefully with your fingers.
16. View the plane from the front and straighten any warps or bends in the fuselage and wings.

TEST FLIGHT

- Test fly the plane according to Test Flight instructions on pages 11 to 13.

Whitewings
Spirit of St. Louis

GLUING INSTRUCTIONS Glue the parts together in the order indicated

3. Glue ㊸ to the underside of the main wing ㊷. When dry, cut off the protruding portions.

4. Glue ⑭ to the fuselage.

5. Glue ㊽ + ㊾ to the fuselage.

Arrows point forward

2. Glue ① through ㊺ together. When dry, cut out the square for ballast in the nose. (You may cut out the squares before gluing together.) If you choose to attach paper clips to the plane nose instead of inserting the lead foil, glue ① through ⑦ together.

1. Fold all tabs outward

8. Glue ⑬ + ⑭ + ⑮ to the main wing using the line on the wing as a guide

Fold the protruding front part of the tab over the top of the wing and glue on

9. Glue ⑯ + ⑰ + ⑱ to the main wing in the same way as No. 8.

Attach landing gear here

7. Glue ⑮, ⑰, and ⑱ together.

10. Glue ⑪ and ⑫ together and attach to the fuselage

6. Glue ⑬, ⑭ and ⑮ together

13. Insert the lead foil into the plane nose. Adjust the weight of lead foil aligning the center of gravity at the ▲ mark. Apply a bit of glue to ⑥ and ⑦ and slide them lightly onto the nose of the fuselage. Also insert the hook in the nose

12. Glue both wheels to ⑪ + ⑫.

11. Make a 5° dihedral angle.

14. After making sure that the center of gravity is at the ▲ mark, re-apply ⑥ and ⑦ securely to the fuselage.

15. Insert the hook into the fuselage and glue on ⑳

Camber the wings slightly

FINISHING TOUCHES

- Give finishing touches to the plane after it dries thoroughly

16. Camber the main wings carefully with your fingers
17. View the plane from the front and straighten any warps or bends in the fuselage and wings

TEST FLIGHT

- Test fly the plane according to Test Flight instructions on pages 11 to 13.

Whilewings

"WINNIE MAE" (Lockheed VEGA)

GLUING INSTRUCTIONS Glue the parts together in the order indicated

"WINNIE MAE" is one of the Lockheed VEGAs which made many new records in the early 1930's. The plane's owner, an oil dealer in Oklahoma, named it after his daughter. Winnie Mae became well-known because the pilot Wiley Post achieved the World's record for fastest flight around the world, both in 1931 and 1933.

5. Glue ⑨ to the underside of ⑧. When dry, cut off the protruding portions.

Arrows point forward.

15. Place a ruler along the center line of the main wing ⑧ + ⑨ and make an approximately 7° dihedral angle. Then glue it firmly to the fuselage.

14. Glue the horizontal stabilizer part ⑩ to the fuselage.

2. Glue ① through ⑤ together.

3. When dry, cut out the square for ballast in the nose. (You should cut out the squares before gluing together.)

4. Insert the hook into the fuselage and glue on ⑰.

1. Fold all tabs outward.

9. Attach the top part of the gear ⑬ + ⑭ to the ○ mark on the body.

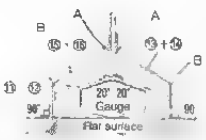
8. Glue left gear parts ⑬ and ⑭ together and bend the assembled piece into the shape shown.

6. Glue parts ⑪ and ⑫ together with ⑪ on top. Then bend the assembled piece along the center line as shown.

7. Glue ⑪ + ⑫ to the tab at the bottom of the plane.

10. Assemble and place the right gear using parts ⑮ and ⑯ in the same manner as ⑬ and ⑭.

11. Apply the angle gauge to the bottom of part ⑪ + ⑫ and make the required angle of 20° as shown.



12. Bend the gear parts ⑬ + ⑭ and ⑮ + ⑯ respectively at points A and B on both sides so that each part forms a 90° angle at the base with respect to the flat surface.

13. Apply glue to the outsides of the two tabs of part ⑪ + ⑫ and attach one to the inside of each gear as indicated.

Camber the wings slightly

16. Insert the lead foil into the plane nose. Adjust the weight of lead foil aligning the center of gravity at the ▲ mark. Apply a bit of glue to ⑥ and ⑦ and stick them lightly to the nose of the fuselage. After making sure that the center of gravity is at the ▲ mark, re-glue ⑥ and ⑦ securely to the fuselage.

FINISHING TOUCHES

- Give finishing touches to the plane after it dries thoroughly.

17. Camber the main wing slightly with your fingers.
18. Using the dihedral angle gauge make sure the dihedral angle is 7°.
19. View the plane from both the front and the back and straighten any warps or bends in the fuselage and wings.

TEST FLIGHT

- Test fly the plane according to Test Flight instructions on pages 11 to 13.

Whitewings

Wright FLYER

GLUING INSTRUCTIONS

Glue the parts together in the order indicated

1.
Fold all tabs outward

2.
Glue ① through ⑦ together

4.
Glue parts ⑪ and ⑫ together with ⑪ on top. Then glue this upper front wing assembly to the tabs on top of the nose

When you glue parts ① through ⑦ you'll find a slit to insert the front wing into

Arrows point forward

5.
Glue ⑭ to the underside of ⑨. When dry, cut off the protruding portions. Then glue this lower main wing assembly to the tabs on the lower part of the fuselage

Arrows point forward.

Arrows point forward

Flight direction

3.
Glue parts ⑬ and ⑭ together with ⑬ on top. Insert this lower front wing assembly into the slit in the nose of the plane and glue it in place

Arrow points forward

7.
Glue the upper wing ⑧ to the fuselage. (Do not glue the upper part of the pylons to the wing yet.) View the wings from the top, bottom, back and front and make sure they are parallel

6.
Glue ⑮ and ⑯ together to make a pylon and glue the bottom of the pylon to the □ mark in the middle of the wing. Do the same with parts ⑰ and ⑱

Flight direction

8.
Glue the top part of the pylons to the underside of the upper wing. Make sure the pylons and the fuselage are parallel as shown

Pylon Fuselage Pylon

Camber the wings slightly

FINISHING TOUCHES

- Give finishing touches to the plane after it dries thoroughly

9. Camber the main wing slightly with your fingers
10. The dihedral angle is not needed
11. When you fly this FLYER outdoors, attach one or two of the included paper clips on the plane nose. Make sure the center of gravity is at ▲ mark. When you fly indoors, it's better to attach no clips to have floating and longer flights
12. View the plane from both the front and the back and straighten any warps or bends in the fuselage and wings.

TEST FLIGHT

- Test fly the plane according to Test Flight instructions on pages 11 to 13 (Canard model). This plane is not suitable for catapult launch so always launch by hand

Whitewings

Lockheed C130 HERCULES

GLUING INSTRUCTIONS

Glue the parts together according to the diagram indicated

3.

Glue the [illegible] to the [illegible] Wing [illegible] portions

Arrows point forward

4.

Turn the horizontal stabilizer [illegible] upside down and glue it to the fuselage along the centerline on the underside of the fuselage

5.

Place the [illegible] along the centerline of the main wing (Ⓟ) [illegible] and at the dihedral angle [illegible] approximately [illegible] Then glue the [illegible] to the fuselage

1.

Fold all tabs outward

2.

Glue Ⓒ through Ⓖ together

FINISHING TOUCHES

- Give the finishing touches to the [illegible] after [illegible] roughly

6. Camber the main wings [illegible] with your fingers
7. Using the dihedral angle gauge make sure the dihedral angle [illegible] the main wing is 7°
8. Sand down slightly along the outer line and [illegible] to the center of the main wing
9. View the plane from both the front and the back and straighten any warps or bends in the fuselage and wings

Arrows points forward

Camber the wings carefully

TEST FLIGHT

- Test fly the plane according to the Test Flight instructions on pages 11 to 13

Whitewings

"STREGA" (Modified P-51 MUSTANG)

Each year the Jupiter Bomber [illegible] of the models at National Championships [illegible] (Regional [illegible] in the Western [illegible] Northeast [illegible] Central [illegible] The [illegible] a new [illegible] average [illegible] 45° [illegible] The [illegible] class is comprised of many a modeler building modified battle planes with great horsepower such as the Mustang, Bearcat, Corsair and Sea-Fury, that were at work during World War II. The Strega, meaning "witch" in Italian, is a remodeled Mustang [illegible]

GLUING INSTRUCTIONS

Glue the parts together according to the diagram indicated

4.

[illegible] the fuselage

Arrow points forward

1.

Fold all tabs outward

3.

Glue Ⓒ to the [illegible] When doing [illegible] protruding portions

2.

[illegible] through [illegible] together

5.

[illegible] along the [illegible] line of the main wing [illegible] and make a dihedral angle of approximately 12°. Then glue the [illegible] to the fuselage (See NOTE on page 41)

Arrows point forward

FINISHING TOUCHES

- Give the finishing touches to the [illegible] after [illegible] roughly

6. Camber the [illegible] carefully with your fingers
7. Using the dihedral angle gauge make sure the dihedral angle for the main wing is 7°
8. View the plane from both the front and the back and straighten any warps or bends in the fuselage and the wings

Camber the wings carefully

TEST FLIGHT

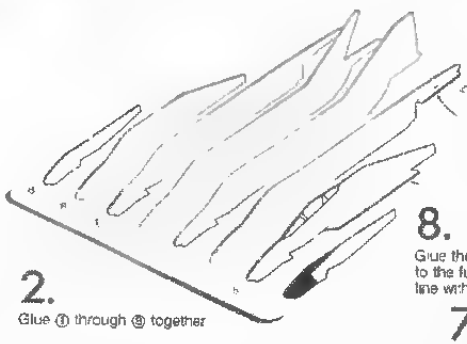
- Test fly the plane according to the Test Flight instructions on pages 11 to 13

Whitewings

McDonnell Douglas PHANTOM II

GLUING INSTRUCTIONS

Glue the parts together in the order indicated



2. Glue ① through ⑨ together

1. Fold all tabs outward

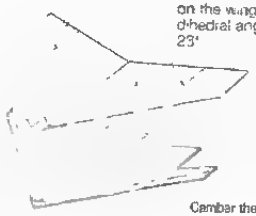
4. Place a ruler along the center line of the horizontal stabilizer ⑪ and make a dihedral angle of approximately 12°

5. Turn the horizontal stabilizer ⑪ upside down and glue it firmly to the fuselage to form a dihedral angle of minus 12°

8. Glue the main wing (⑩+⑩) firmly to the fuselage aligning its center line with the center of the fuselage

7. Place a ruler along the lines on the wing tips and make a dihedral angle of approximately 23°

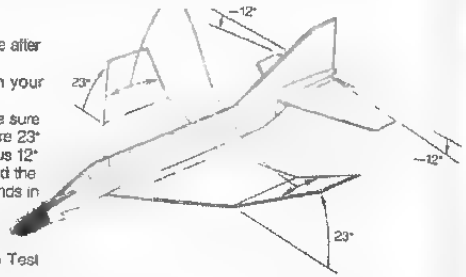
6. Make a pinhole at both ends of the center line on the top side of the main wing. Turn the main wing over. Link the pinholes together with a ruler and draw a center line on the bottom side of the main wing



3. Glue ⑬ to the underside of ⑩. When dry, cut off the protruding portions

Arrows point forward

Camber the wingtips carefully



FINISHING TOUCHES

- Give the finishing touches to the plane after it dries thoroughly

9. Camber the wingtips carefully with your fingers
10. Using the dihedral angle gauge make sure the dihedral angle for the wing tips are 23° and for the horizontal stabilizer minus 12°
11. View the plane from both the front and the back and straighten any warps or bends in the fuselage and wings.

TEST FLIGHT

- Test fly the plane according to the Test Flight instructions on pages 11 to 13

Whitewings

PANORAMA PLANE

—IMAGINE A PLANE DESIGNED SO THAT EVERYONE CAN HAVE A WINDOW SEAT—

GLUING INSTRUCTIONS

Glue the parts together in the order indicated

6. Glue the tail section (⑩+⑩+⑩) firmly to the fuselage

3. Glue ⑬ to the underside of ⑩. When dry, cut off the protruding portions

Arrows point forward

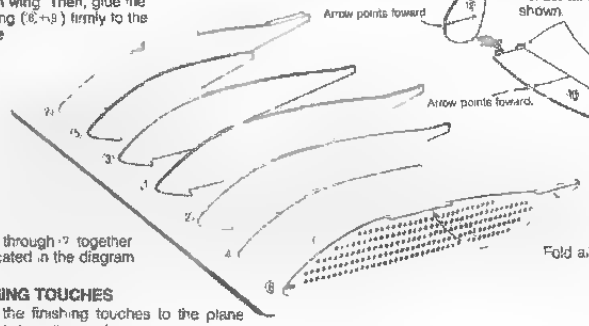
5. Glue the vertical stabilizers ⑪ and ⑫ to the tabs of the horizontal stabilizer ⑩ aligning the arrows on ⑪ and ⑫ with the folded tab lines of ⑩

7. Placing a ruler along the center line of the main wing (⑧+⑧) bend each side up individually to make a dihedral angle of approximately 8° for both sides of the main wing. Then, glue the main wing (⑧+⑧) firmly to the fuselage

4. Fold both tabs of the horizontal stabilizer ⑩ as shown.

Arrow points toward

Arrow points toward.



2. Glue 1 through 12 together as indicated in the diagram

1. Fold all tabs outward

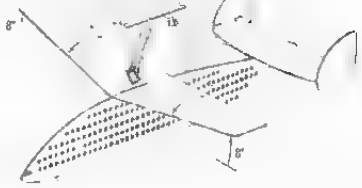
FINISHING TOUCHES

- Give the finishing touches to the plane after it dries thoroughly

8. Camber the main wing slightly with your fingers
9. Using the dihedral angle gauge make sure the dihedral angle of the main wing is 8°
10. Fold ⑬ up slightly along both sides of its center line and glue it onto the center of the main wing
11. View the plane from both the front and the back and straighten any warps or bends in the fuselage and the wings.

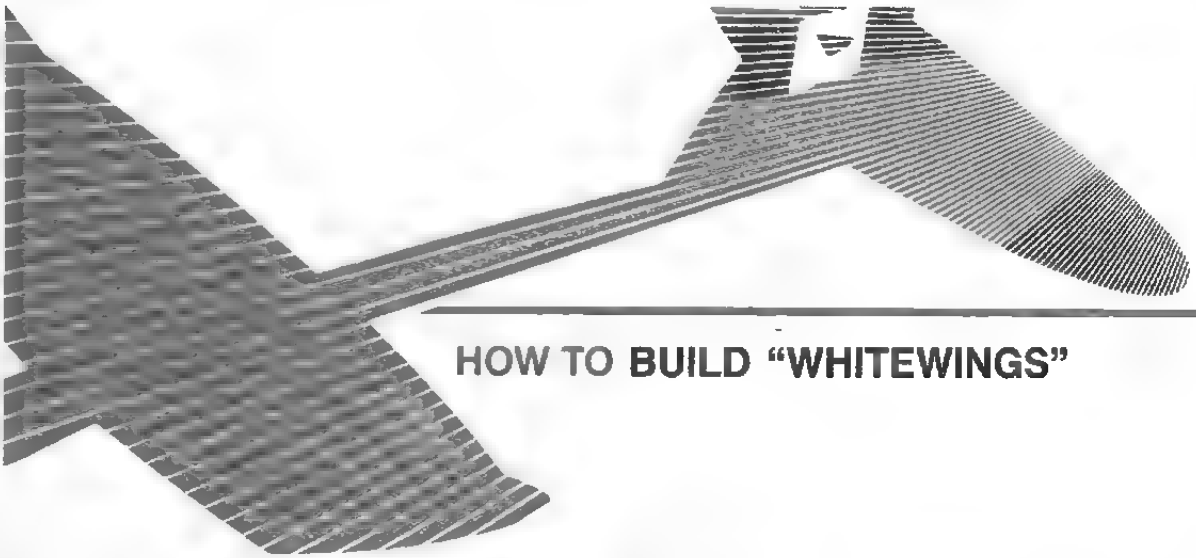
Arrow points toward

Camber the wings carefully

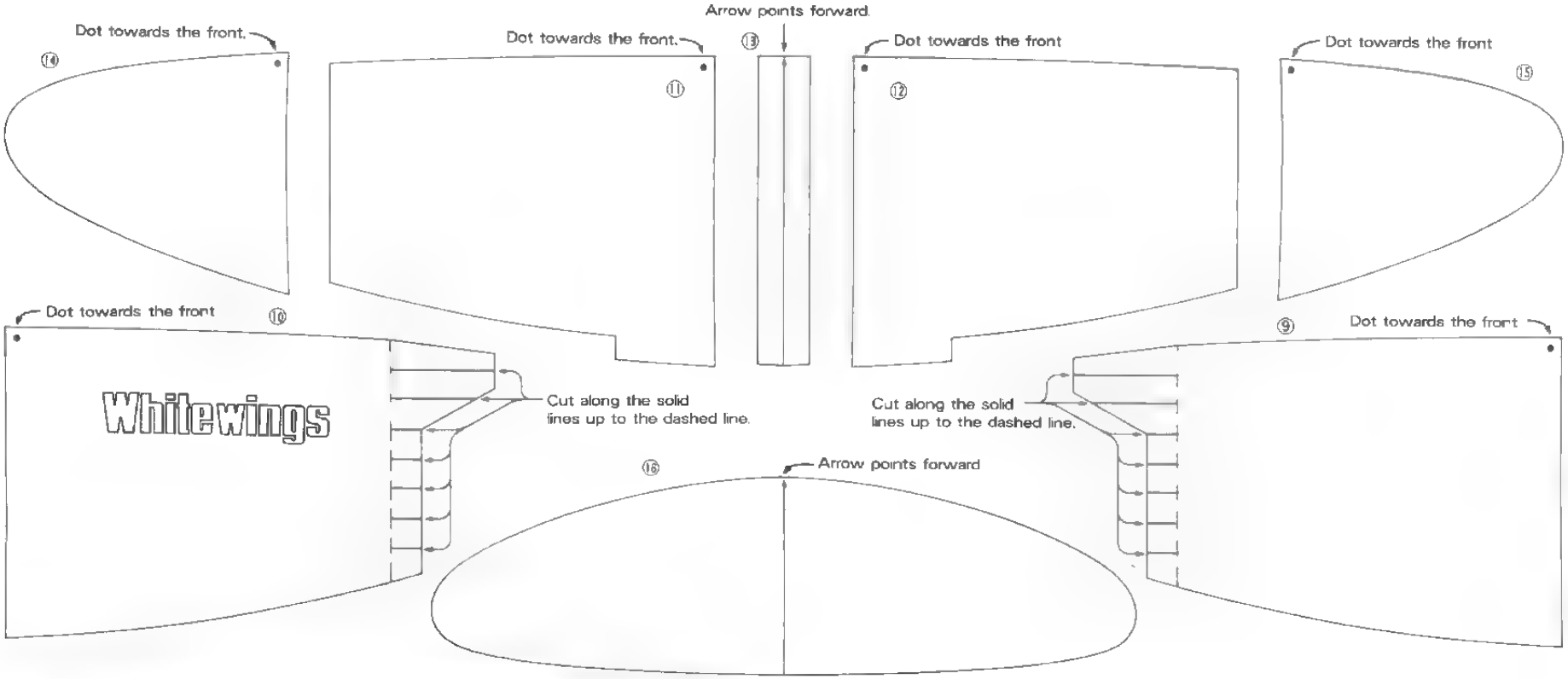


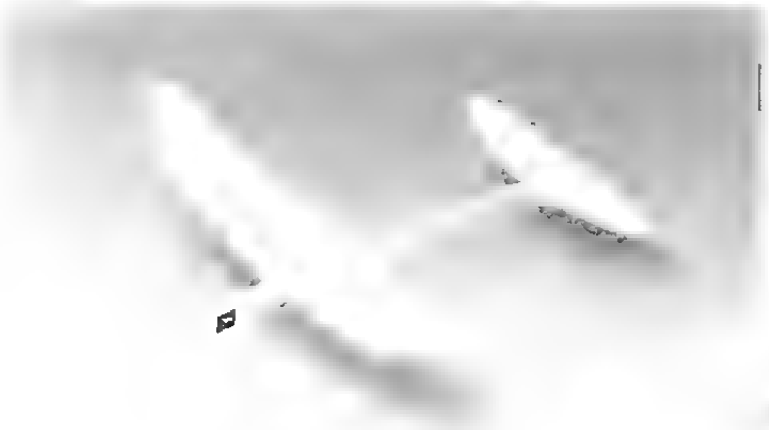
TEST FLIGHT

- Test fly the plane according to the Test Flight instructions for Regular Planes on pages 11 to 13



HOW TO BUILD "WHITEWINGS"



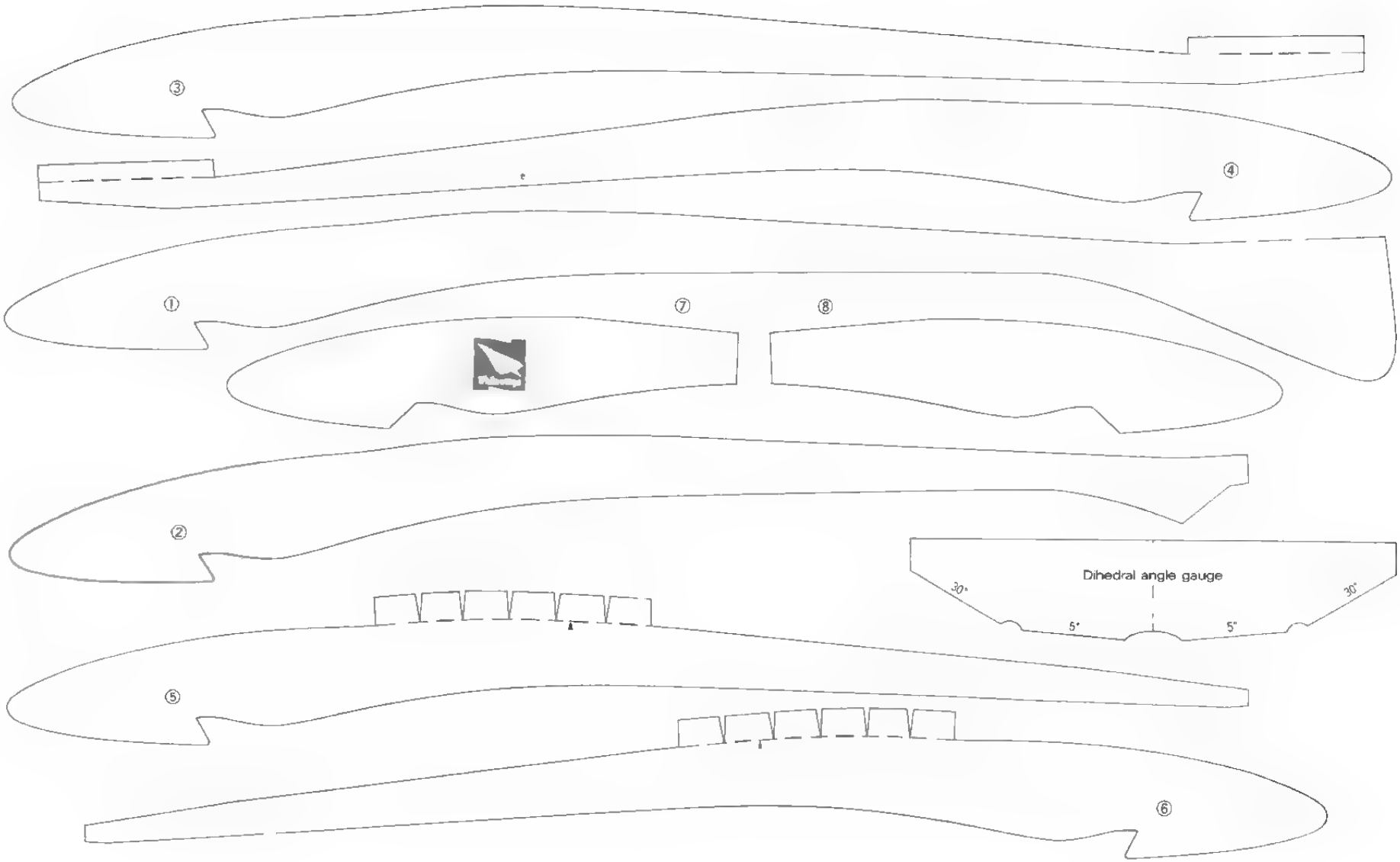


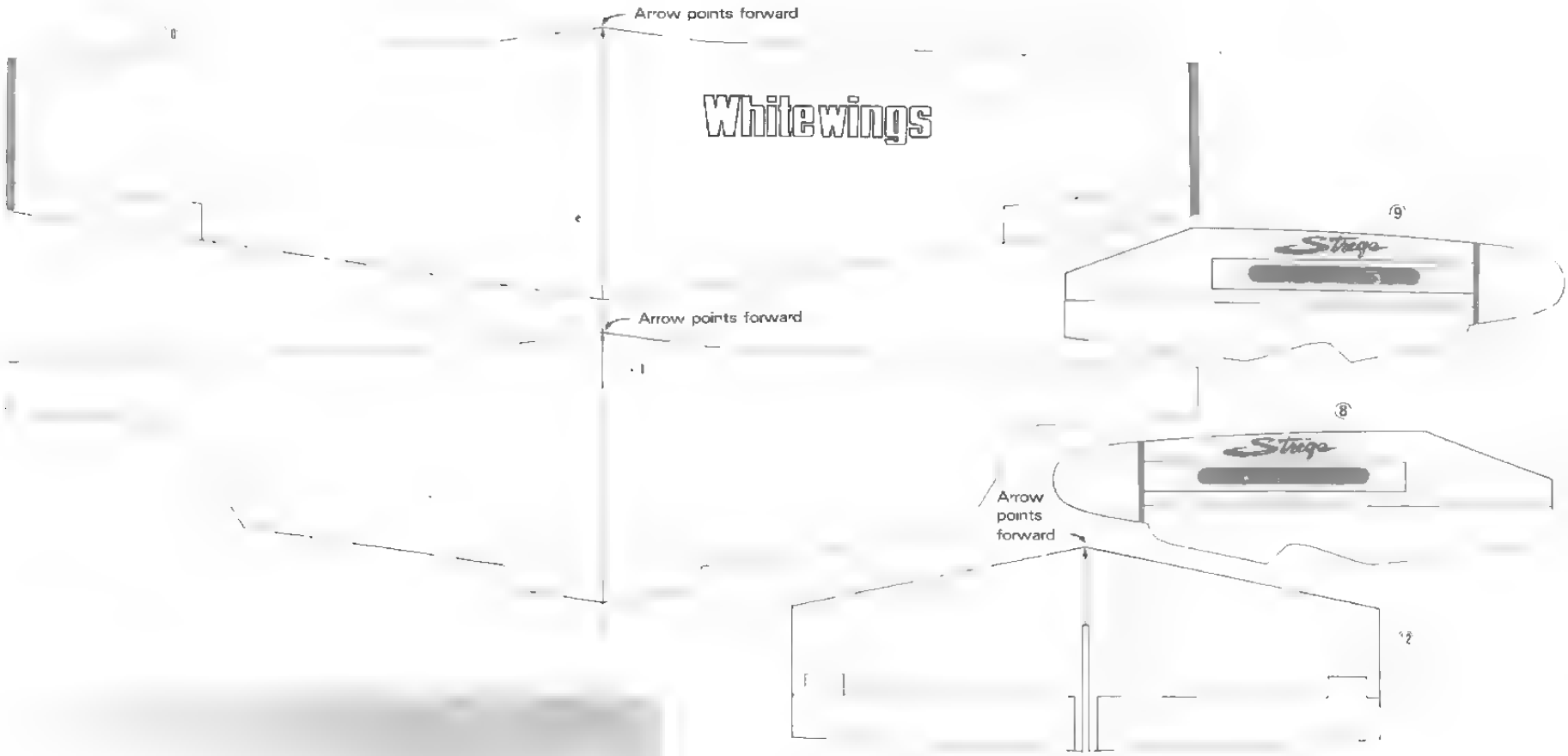
Whitewings®

Racer 522 RICHARD

- - - - - Fold with dashed line inside
↑ Arrows point forward.

Bend-resistant direction


③
④
①
⑦
⑧
②
Dihedral angle gauge
30°
5°
5°
30°
⑤
⑥



Whitewings®

"STREGA"

------ Fold with dashed line inside
↓ Arrows point forward

Bend-resistant direction

8

Landing gear strut position mark

Whitewings

Arrow points forward

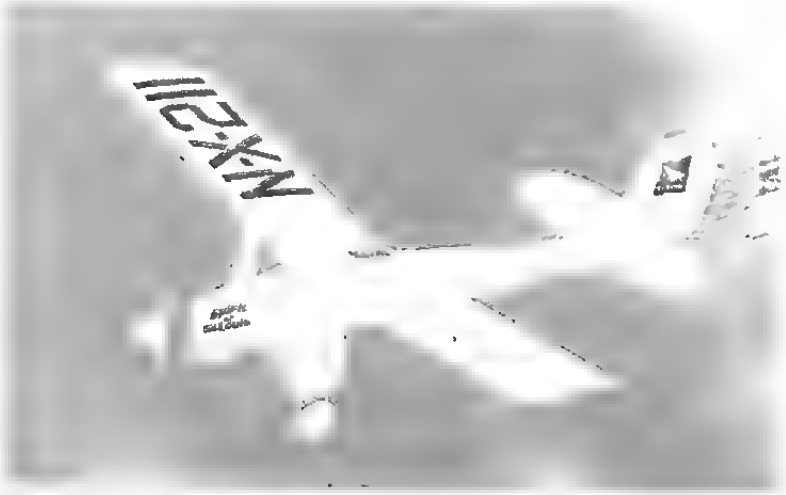
9

Landing gear strut position mark

N-X-211

Arrow points forward

10

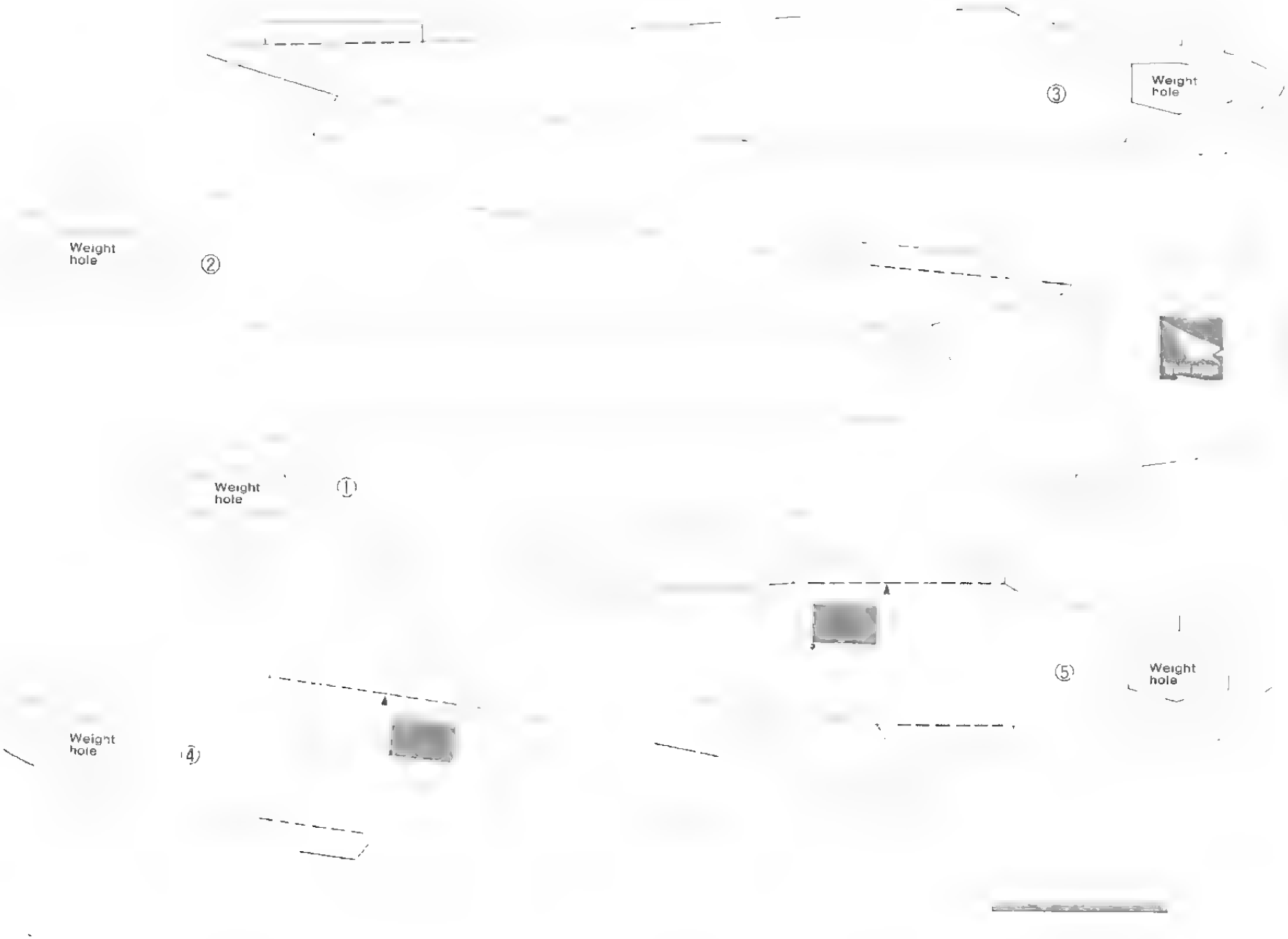


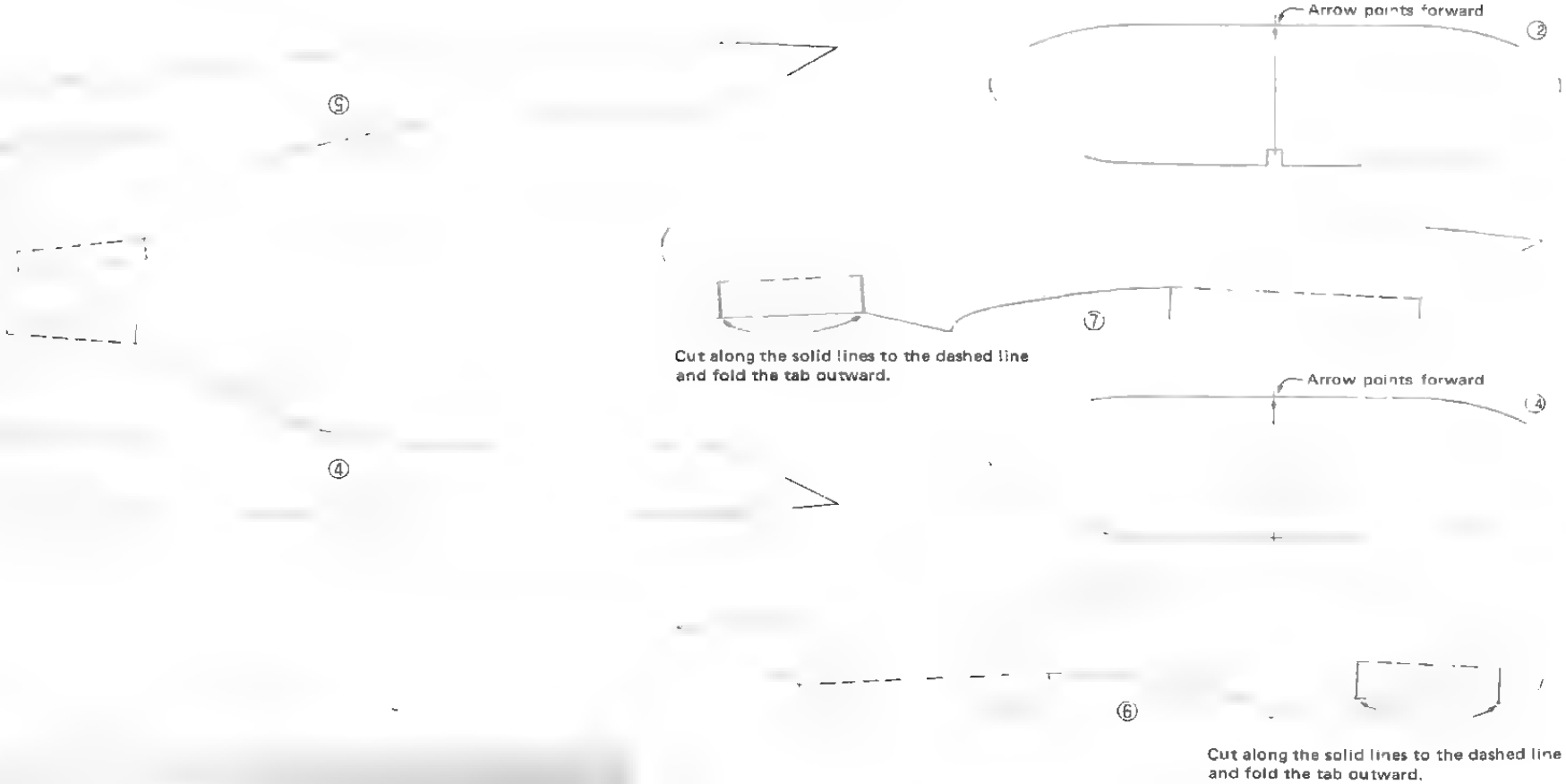
Whitewings

Spirit of St. Louis

Fold with dashed line inside
Arrows point forward

Bend resistant direction


Weight hole
③
Weight hole
②
Weight hole
①
⑤
Weight hole
Weight hole
④



Whitewings®

Wright FLYER

------ Fold with dashed line inside.

↑ Arrows point forward

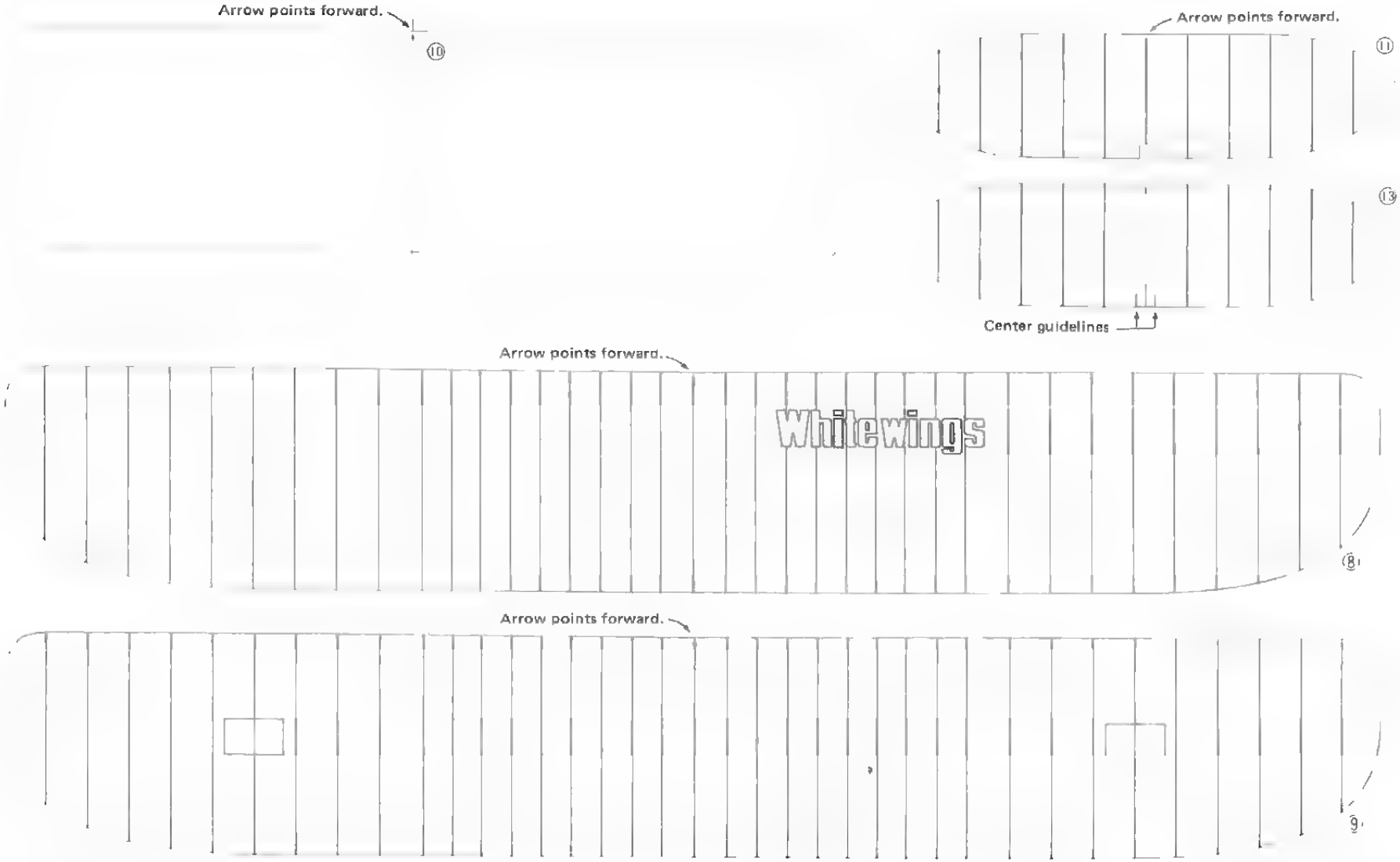
Bend-resistant direction

Cut this part out.
①

Cut this part out.
②

Cut this part out.
③

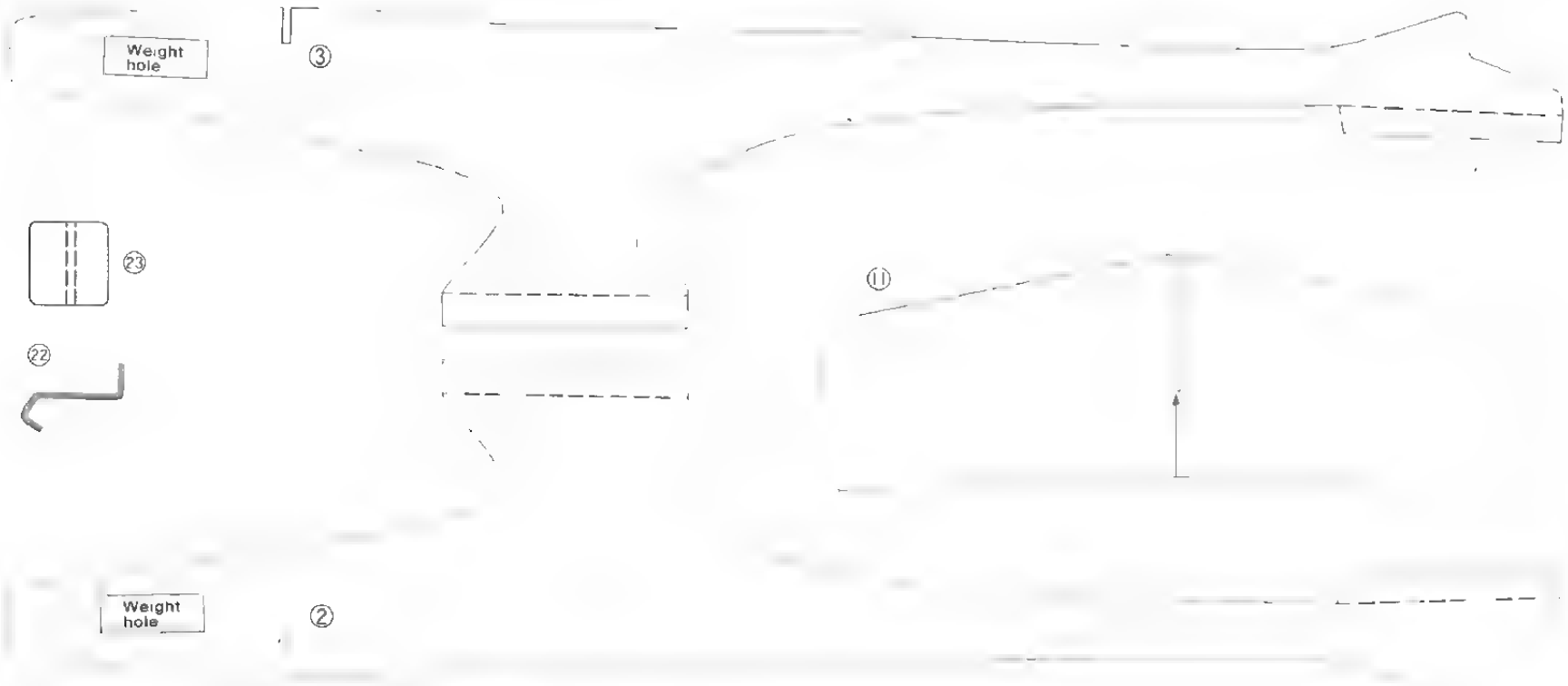
⑮
⑯
⑰
⑱

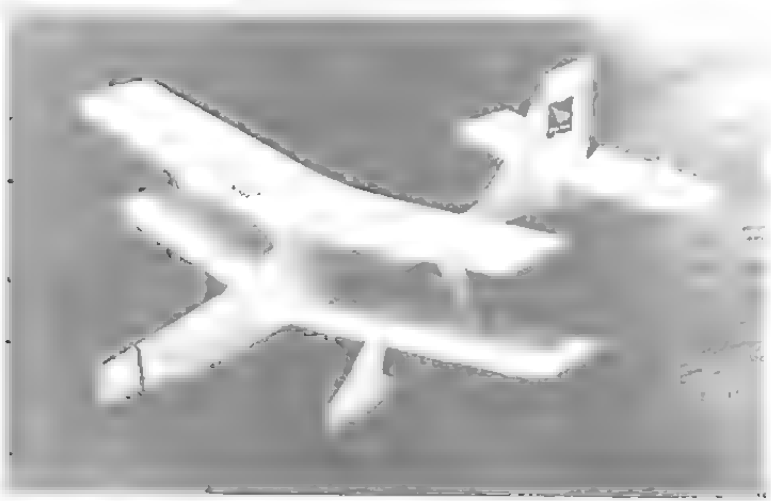


Whitewings® Wright FLYER

▲ Arrows point forward.

Bend-resistant direction





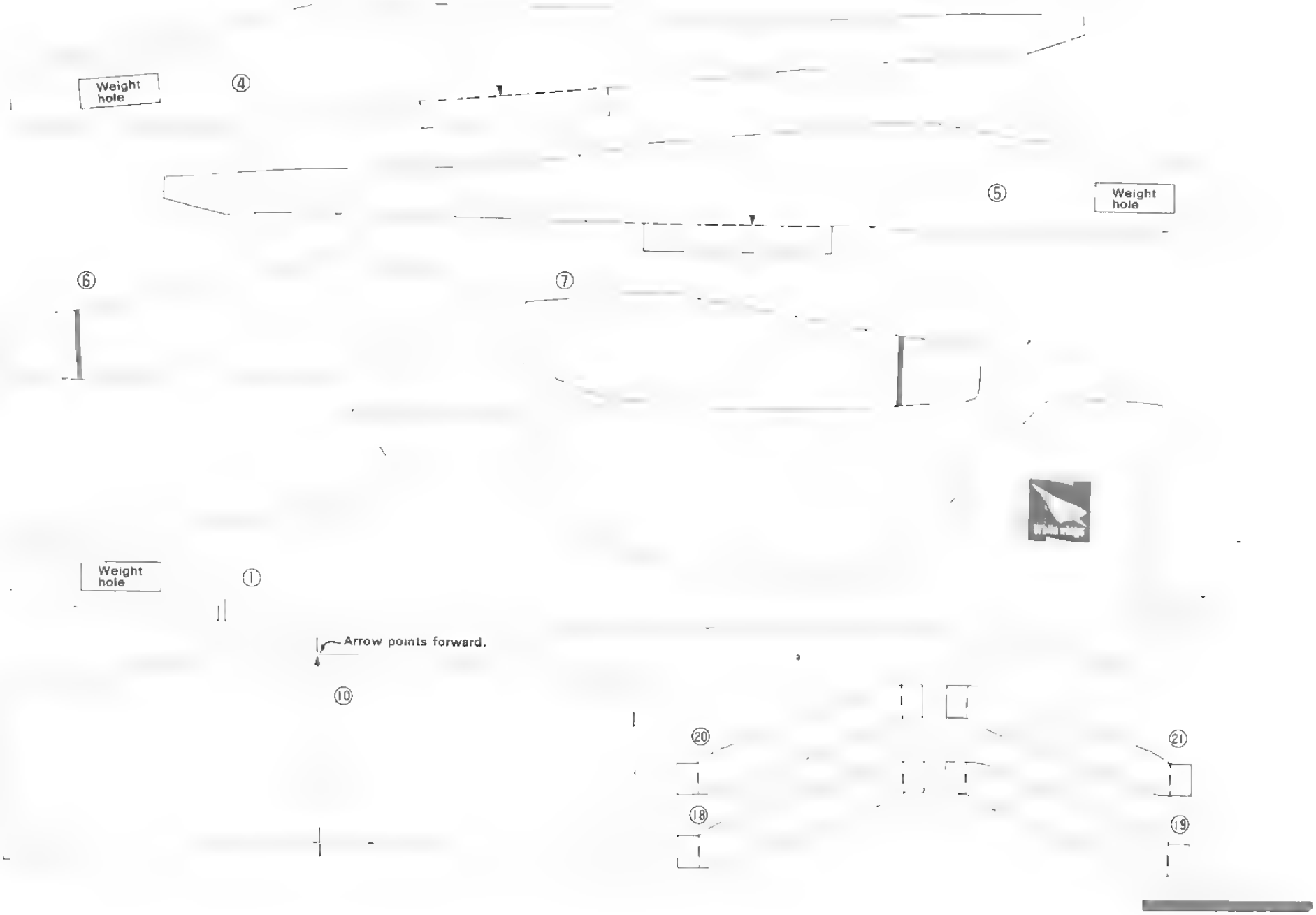
Whitewings®

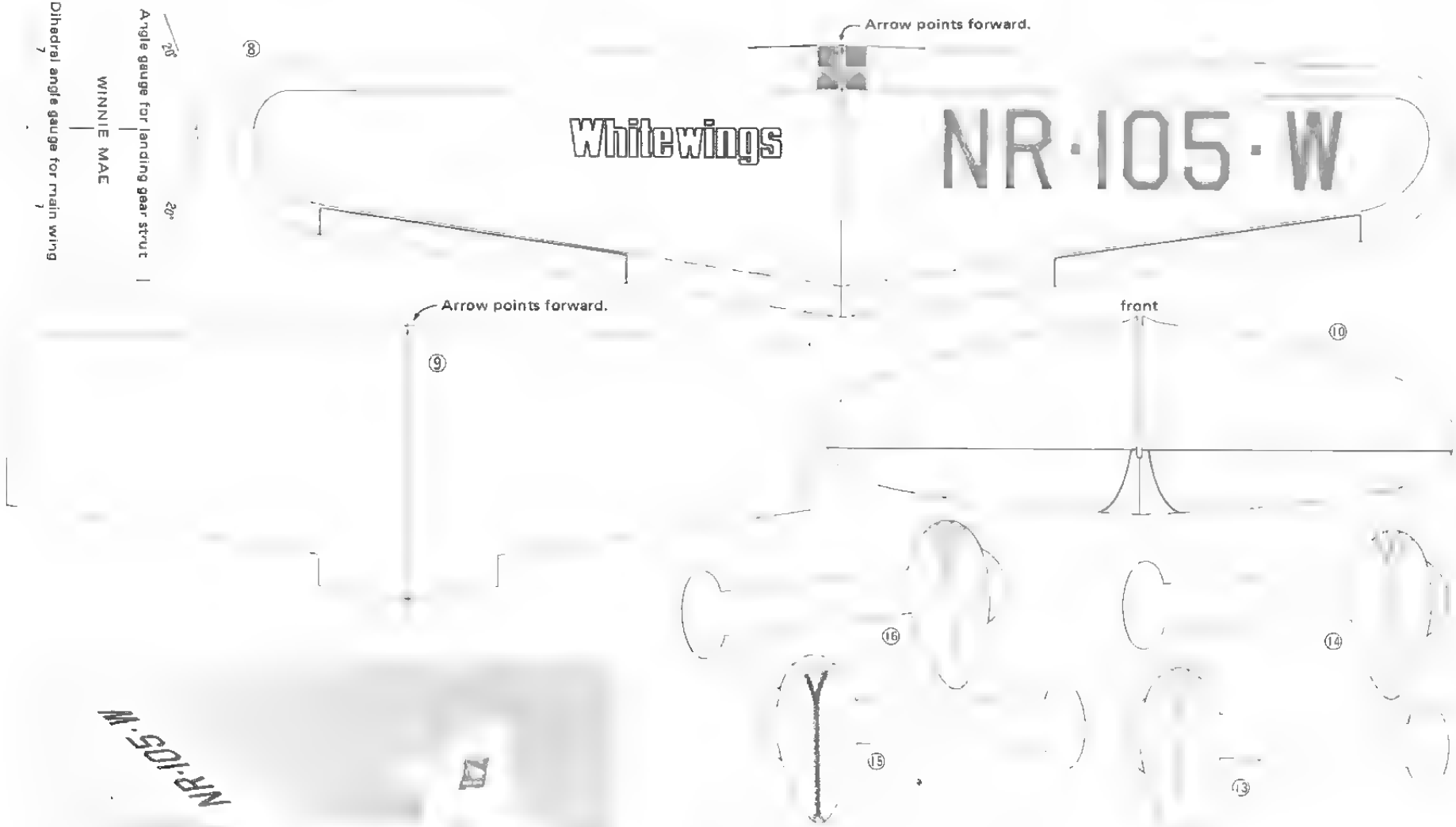
Bi-plane

— Fold with dashed line inside
• Arrows point forward

Bend resistant direction

Whitewings® Bi-plane


Weight hole
④
⑤
Weight hole
⑥
⑦
Weight hole
①
Arrow points forward.
⑩
⑳
㉑
⑱
⑲

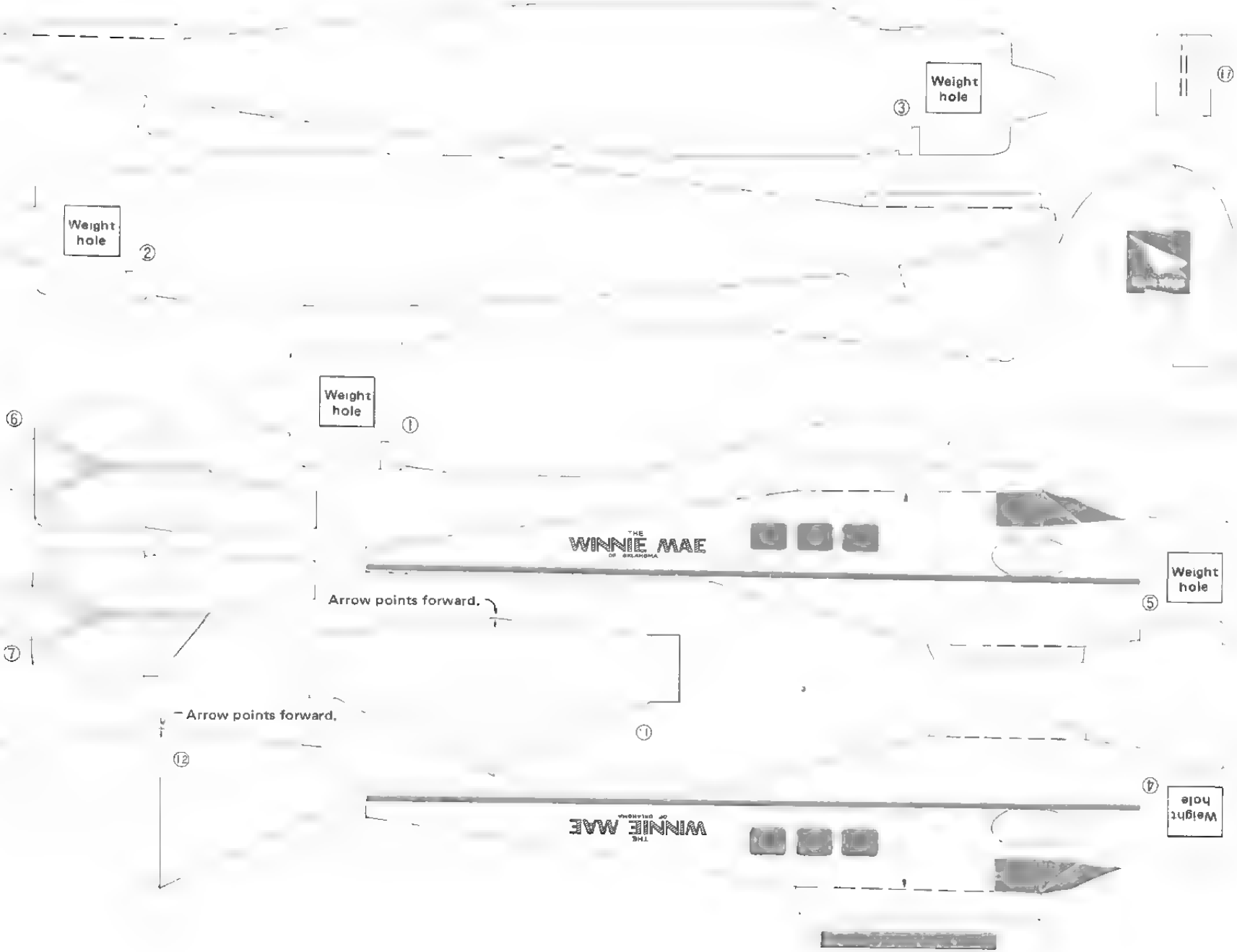


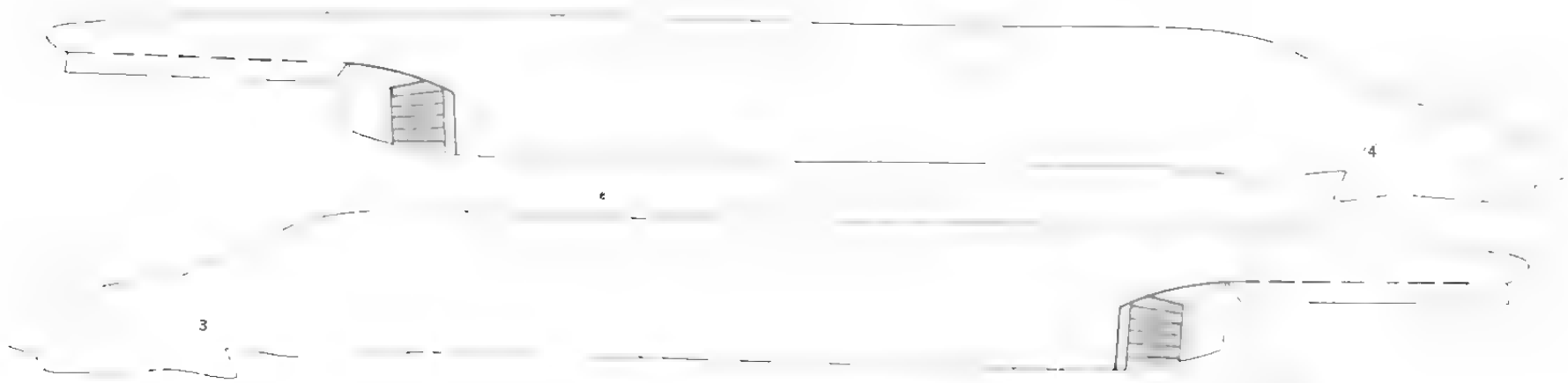
Whitewings®

WINNIE MAE

---- Fold with dashed line inside.
↑ Arrows point forward.

Bend-resistant direction


Weight hole
③
⑪
Weight hole
②
Weight hole
⑥
①
THE WINNIE MAE OF OKLAHOMA
Weight hole
⑤
Arrow points forward.
⑦
Arrow points forward.
①
⑫
Weight hole
④
THE WINNIE MAE OF OKLAHOMA

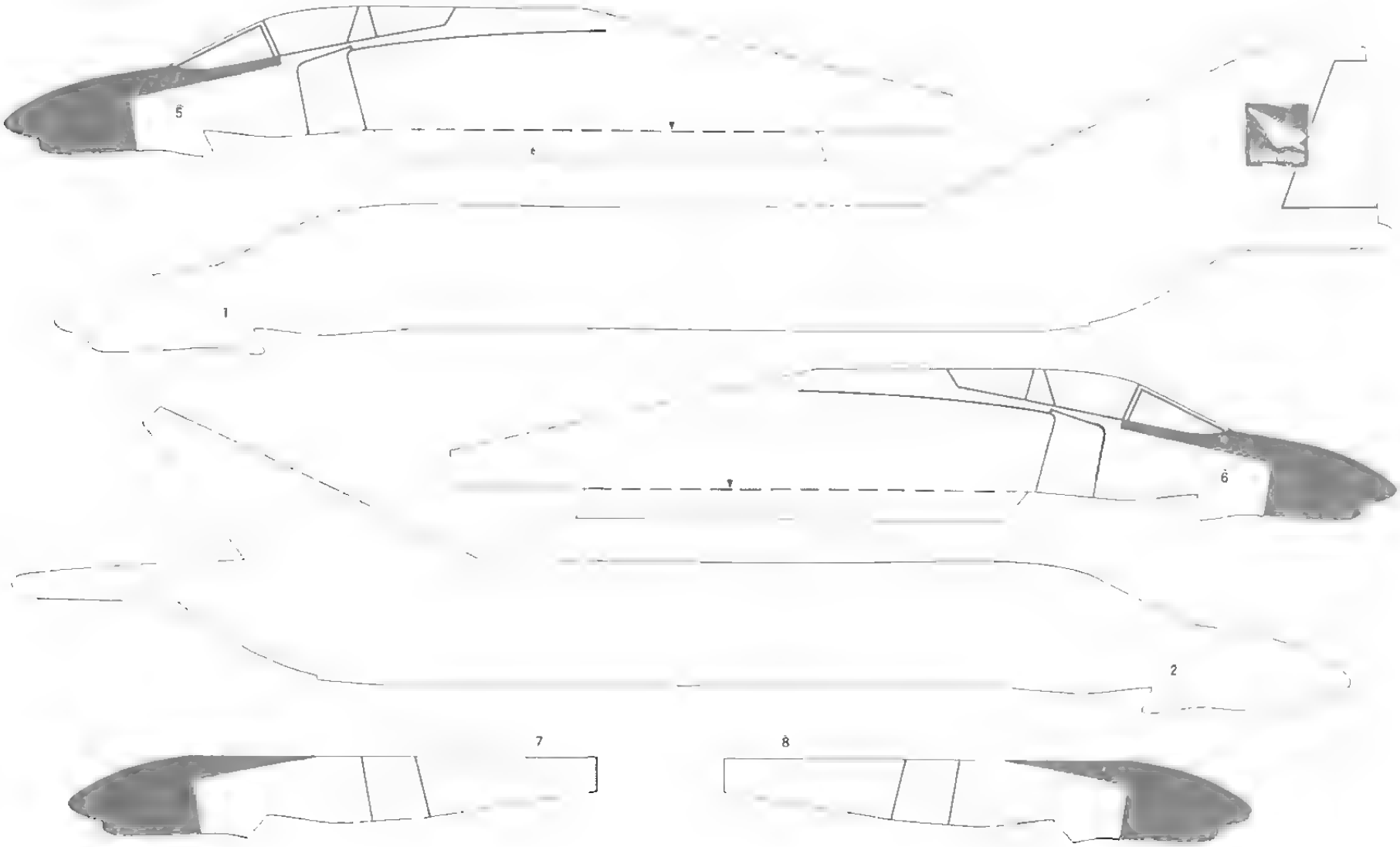


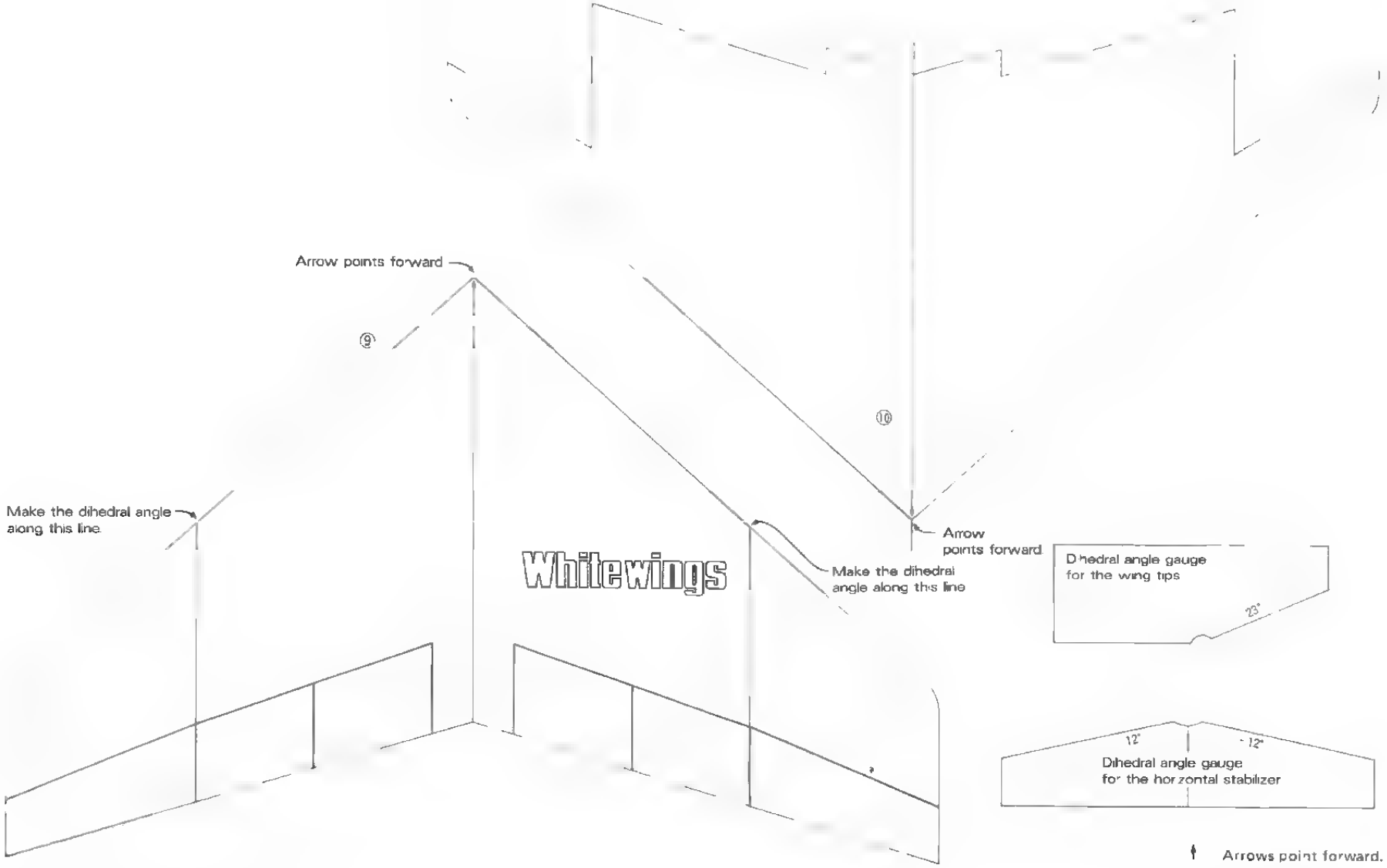
Whitewings®

McDonnell Douglas PHANTOM II

------ Fold with dashed line inside
↑ Arrow points forward

Bend-resistant direction


5
1
6
2
7
8



Whitewings McDonnell Douglas PHANTOM II

Arrow points forward.

⑫

Dots toward the front.

Whitewings

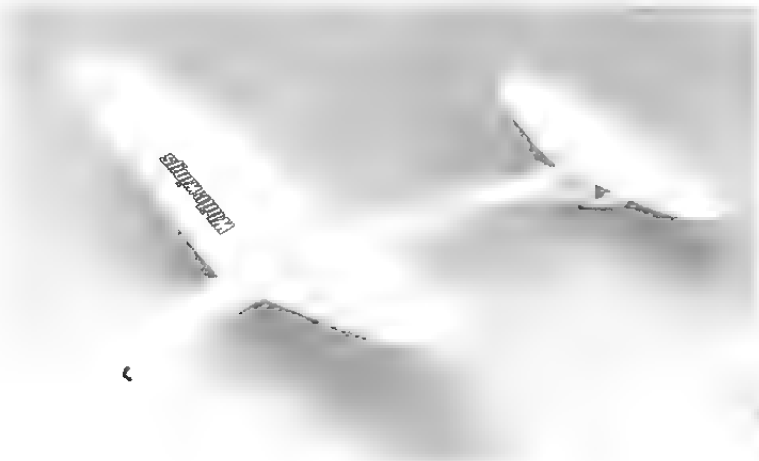
⑧

⑨

Dots toward the front

⑩

⑪



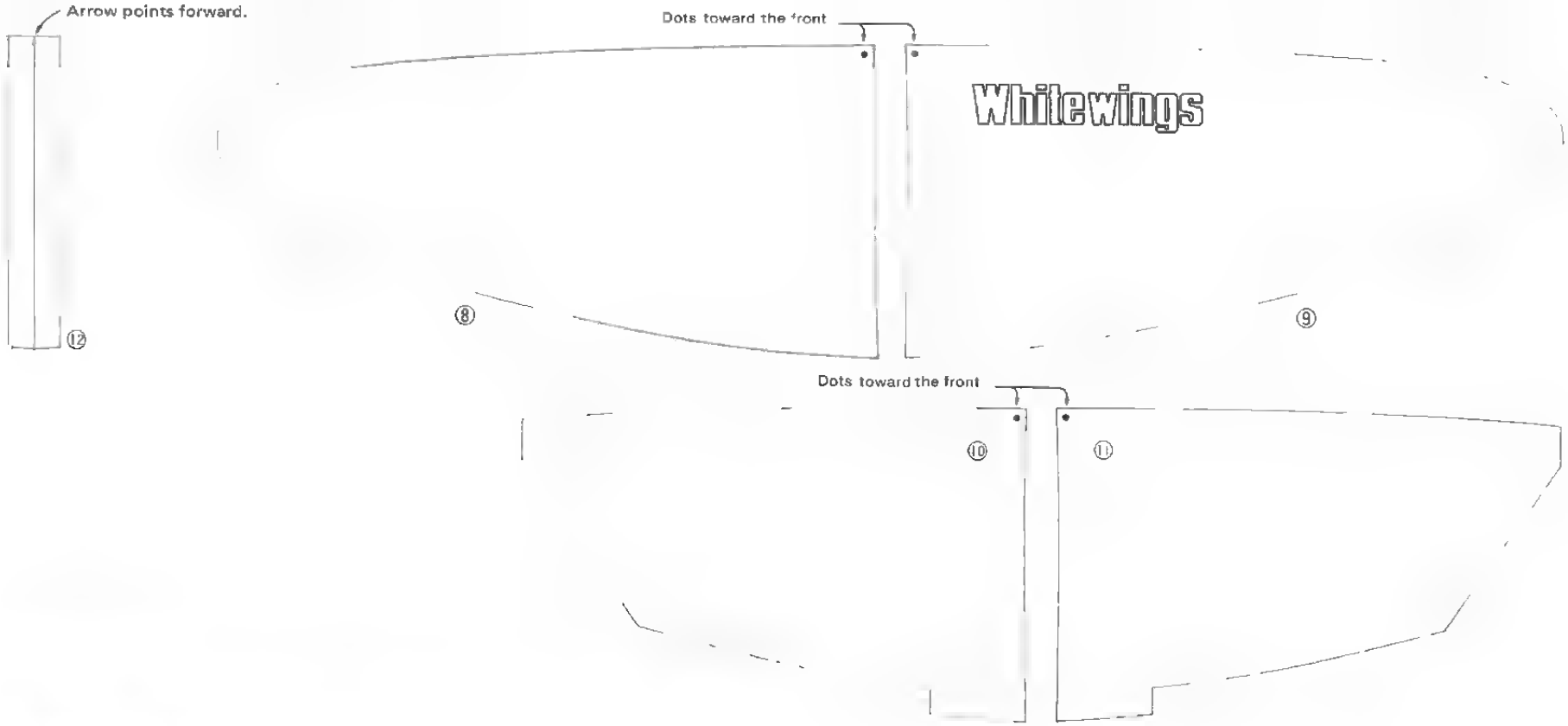
Whitewings®

Racer 513 Meadowlark

------ Fold with dashed line inside.
↑ Arrows point forward.

Bend-resistant direction


Weight hole
③
Weight hole
①
④
Weight hole
Weight hole
⑤
②
Weight hole
⑥
⑦
Arrow points forward.
⑬
⑭
Dihedral angle gauge
15°
15°

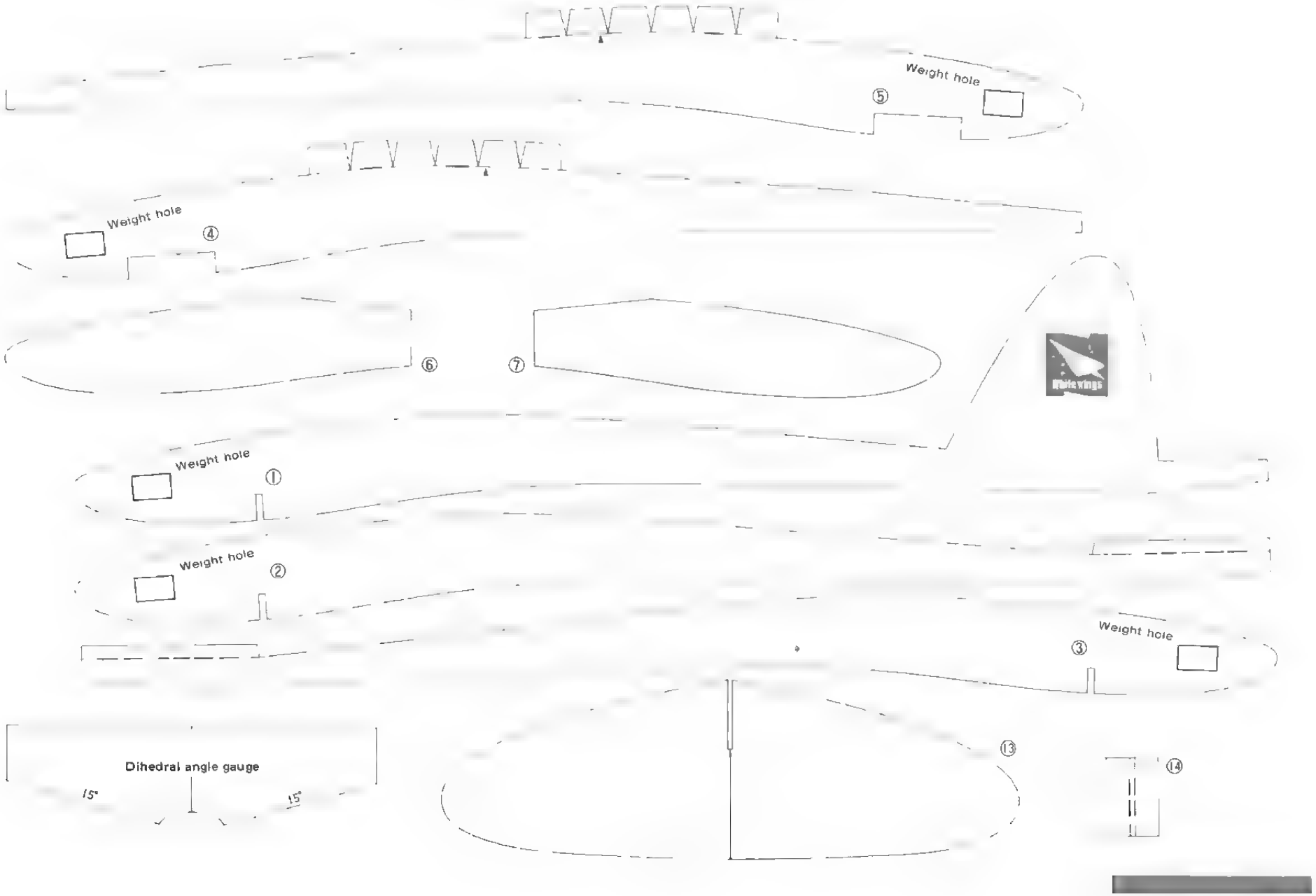


Whitewings®

Racer 512 Finch

------ Fold with dashed line inside.
↑ Arrows point forward.

Bend-resistant direction


Weight hole
⑤
Weight hole
④
⑥
⑦
Weight hole
①
Weight hole
②
Weight hole
③
Dihedral angle gauge
15°
15°
⑬
⑭

Dihedral ang e gauge

8 8

3

(2)

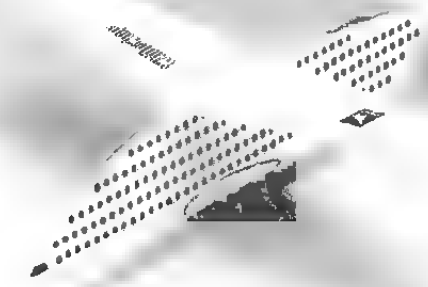
Whitewings®

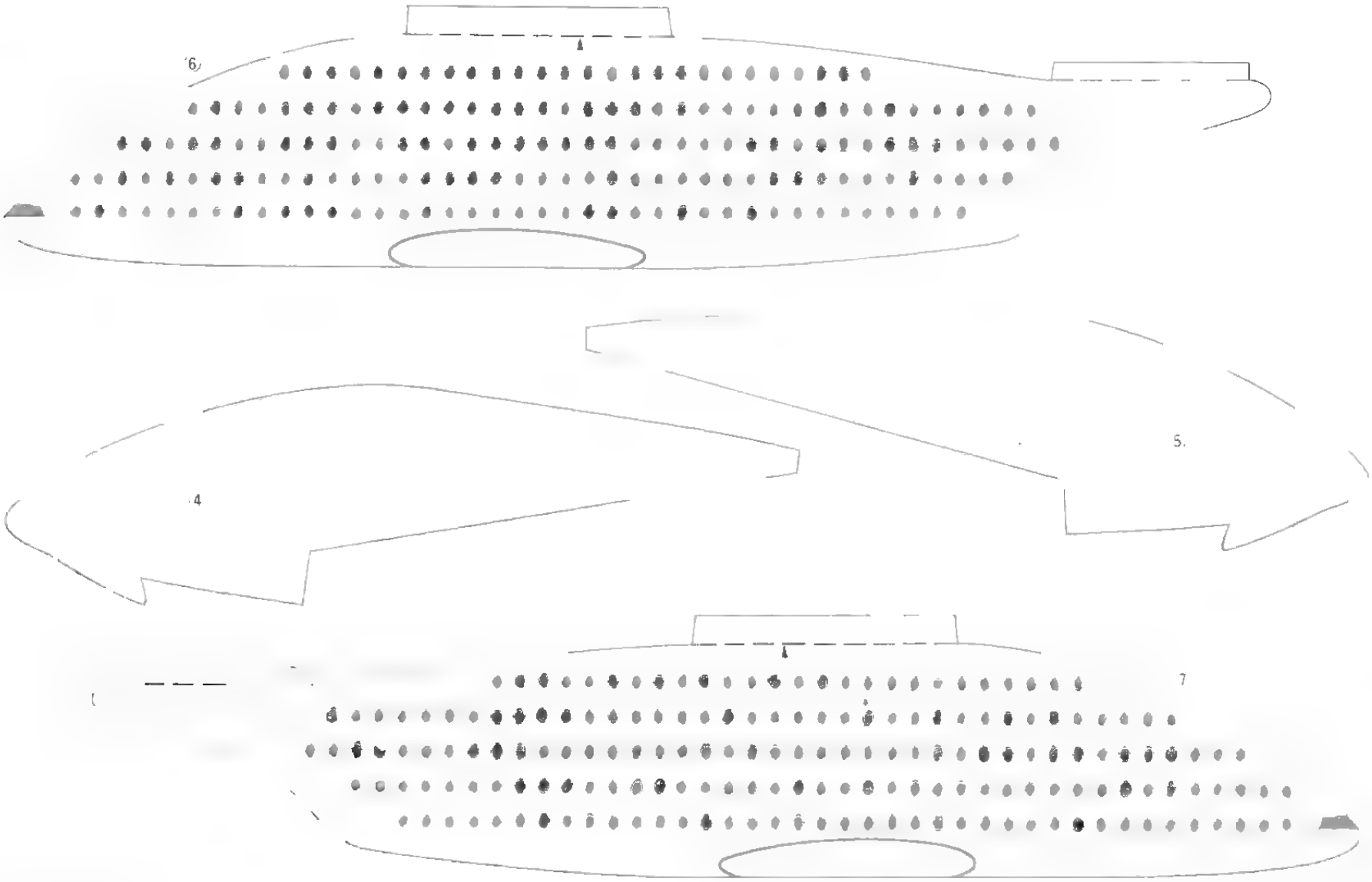
PANORAMA PLANE

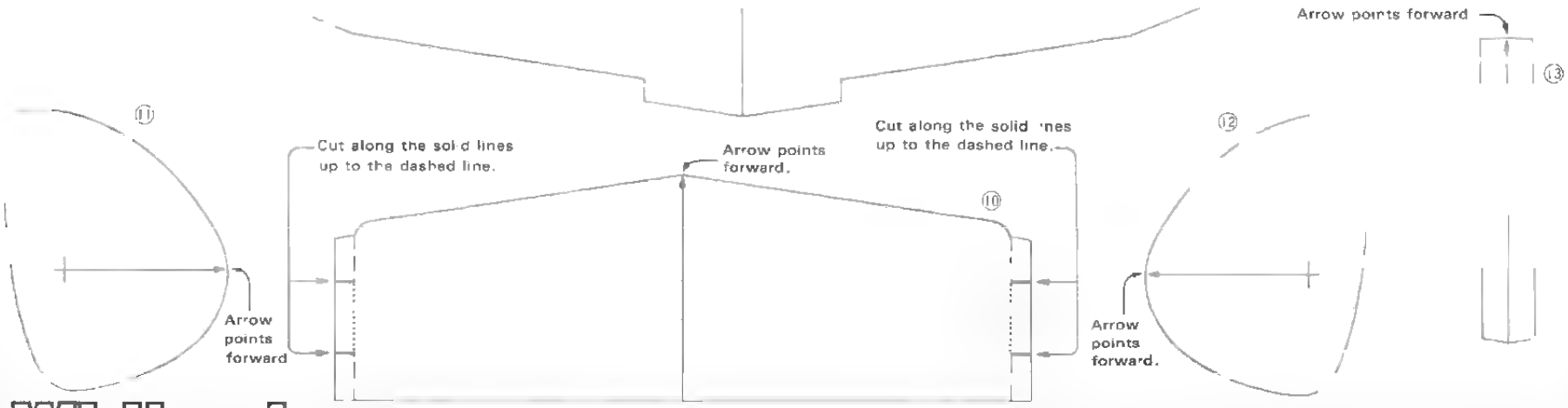
------ Fold with dashed line inside

↑ Arrows point forward

Bend resistant direction



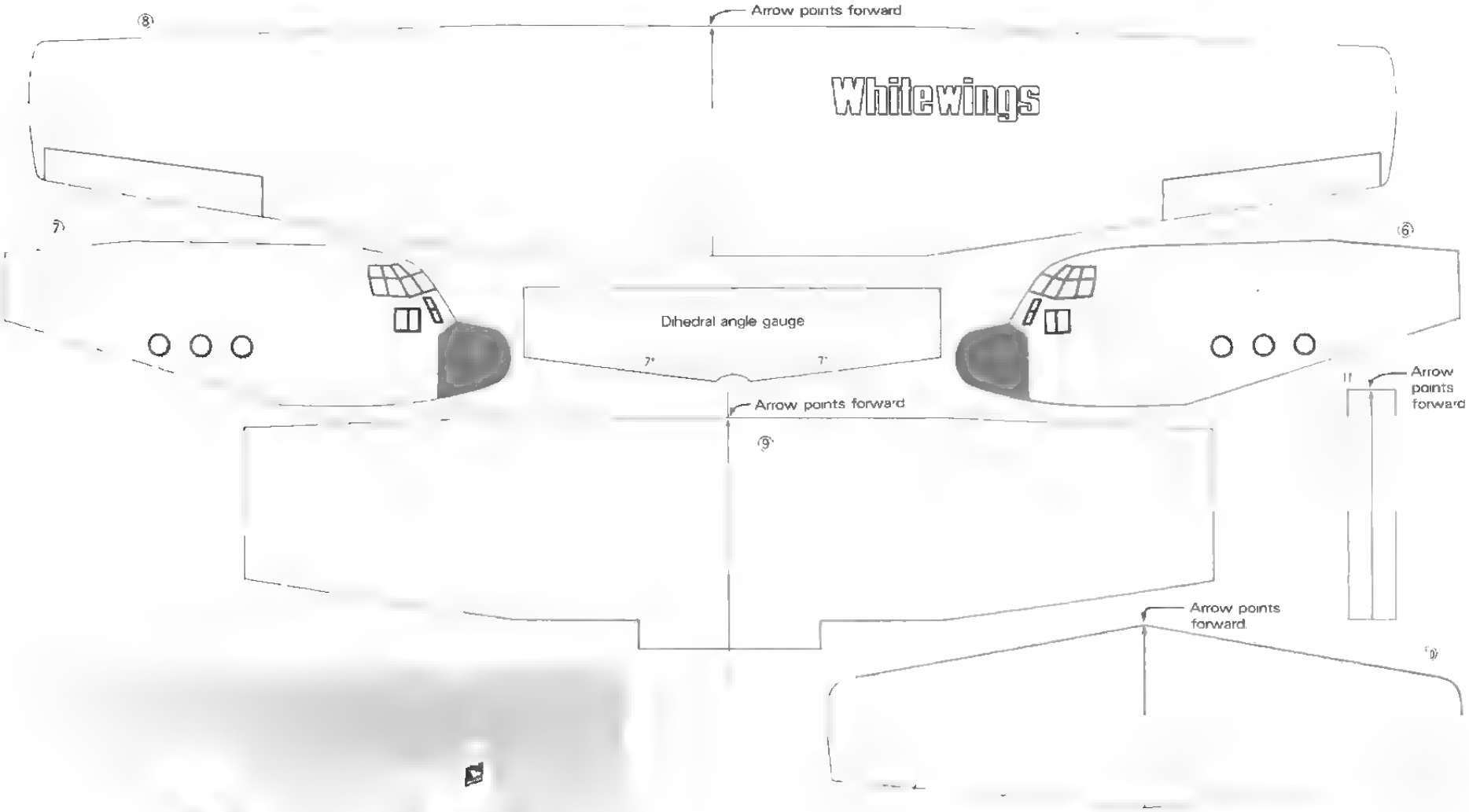

6.
5.
4
7



Whitewings PANORAMA PLANE

Fold with dotted line outside
Fold with dashed line inside
Arrows point forward

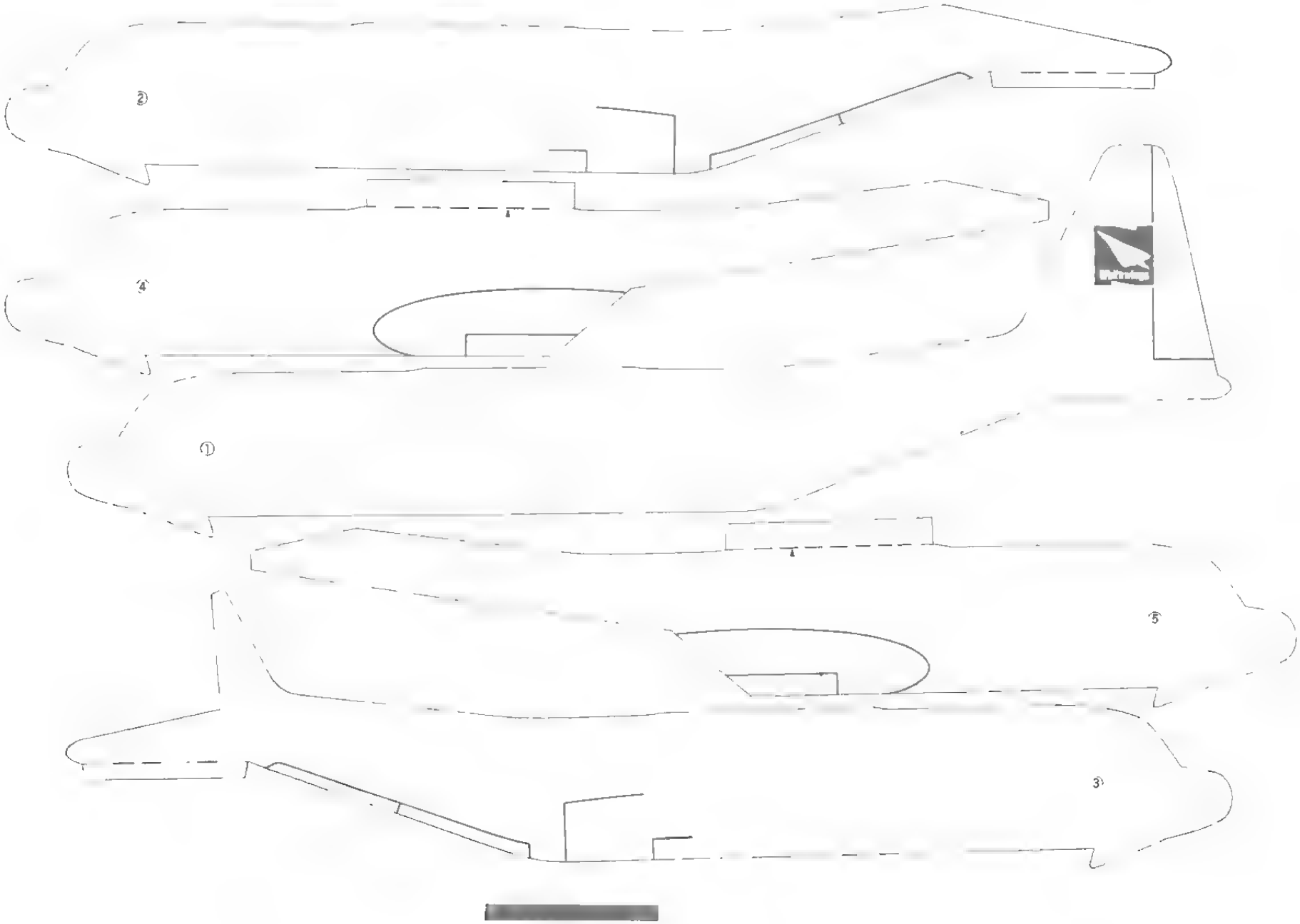
Bend-resistant direction



Whitewings®

Lockheed C130 HERCULES

Fold with dashed line inside
Arrows point forward


②
④
①
⑤
③

Arrow points forward.

Whitewings

⑧

Arrow points forward.

⑨

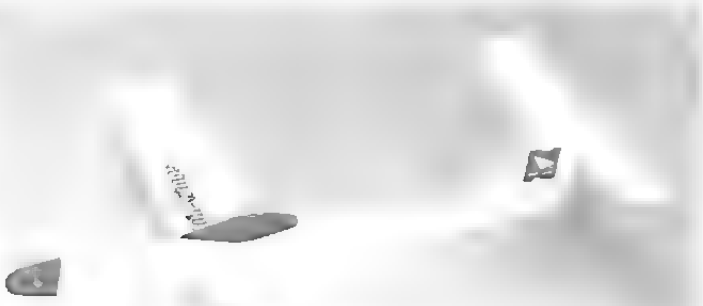
Arrow points forward.

⑩

13°

13°

Dihedral angle gauge

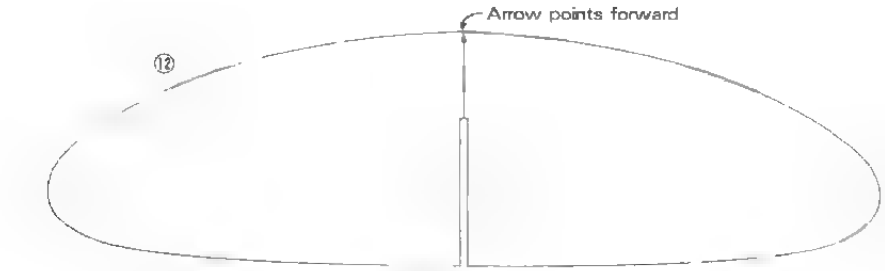


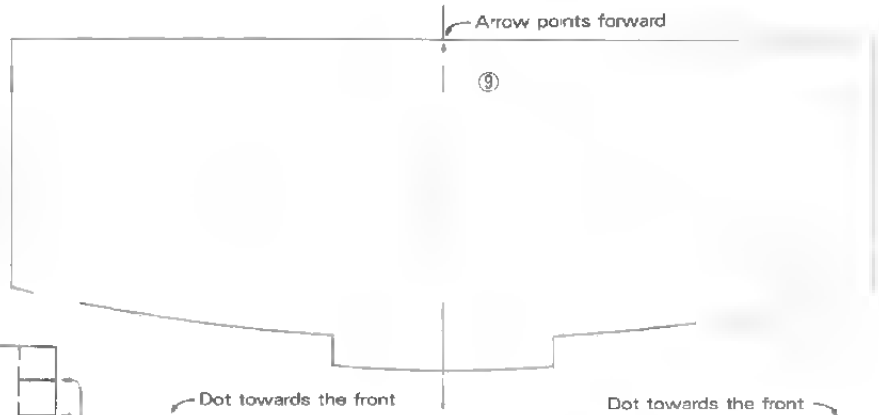
Whitewings®

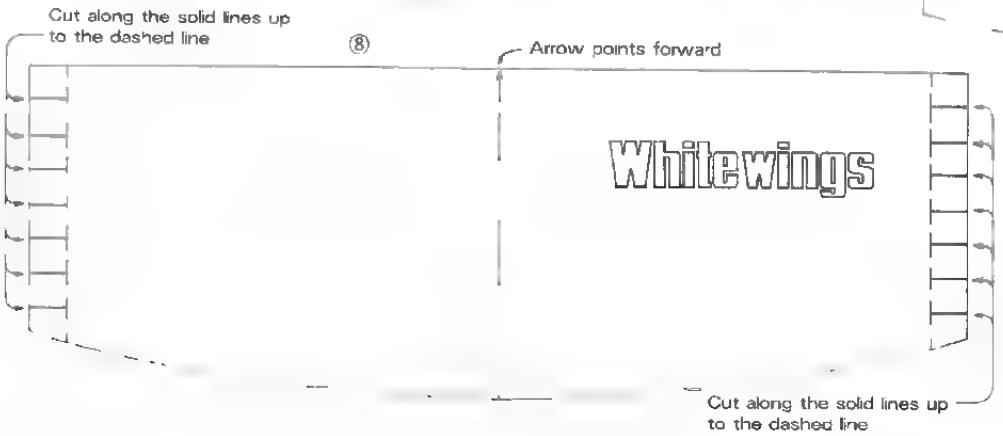
Light Plane 304 THRASHER

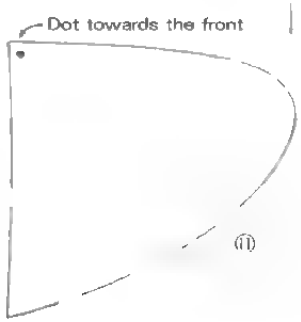
Fold with dashed line inside.
Arrows point forward.

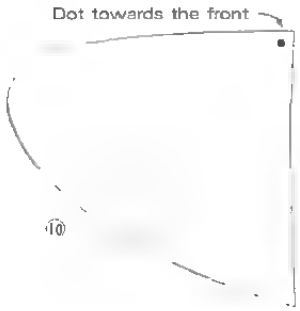
Bend-resistant direction







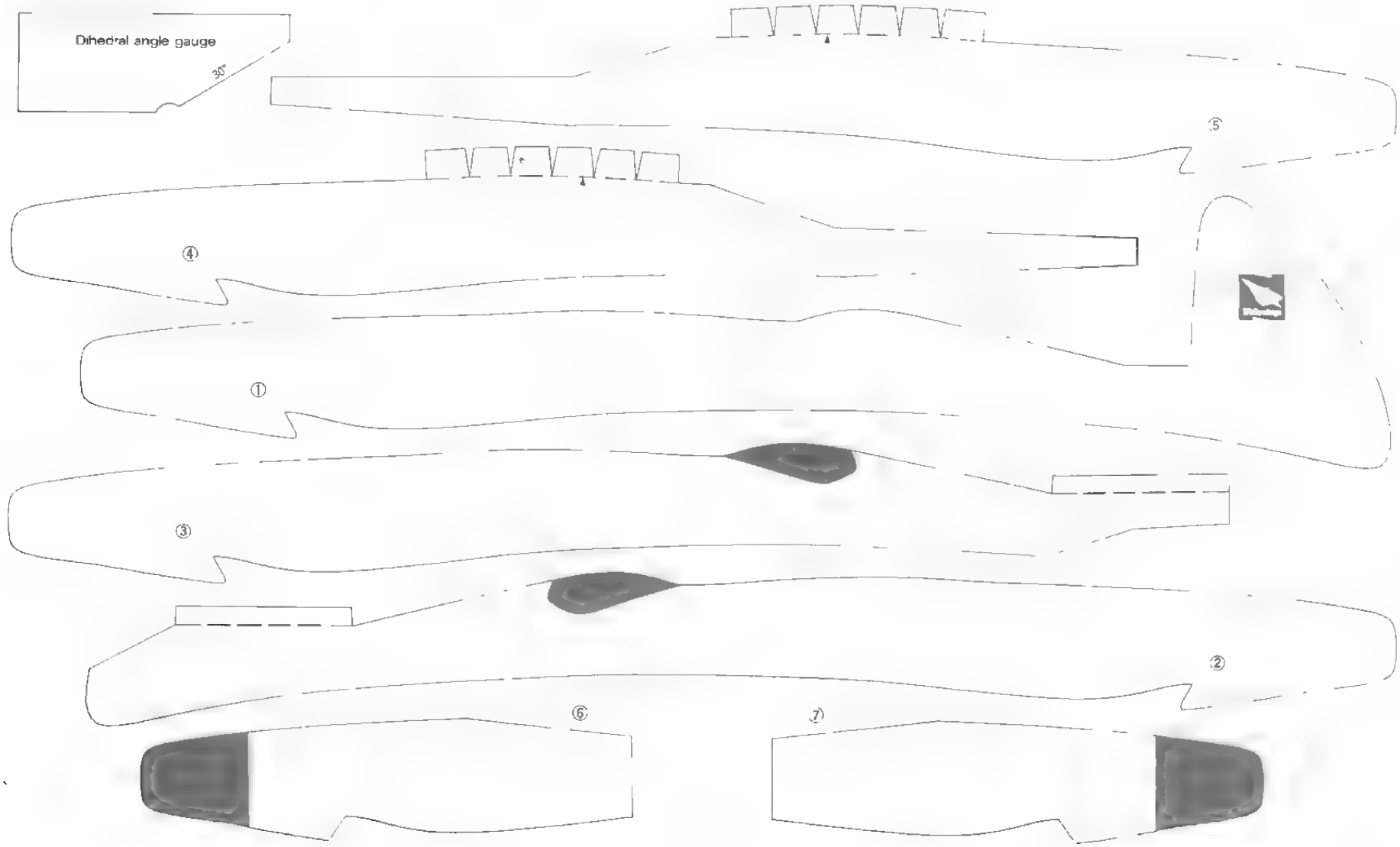




Whitewings®

Light Plane 305 WILBUR

Fold with dashed line inside.
Arrows point forward.


Dihedral angle gauge
30°
⑤
④
①
③
②
⑥
⑦

Arrow points forward

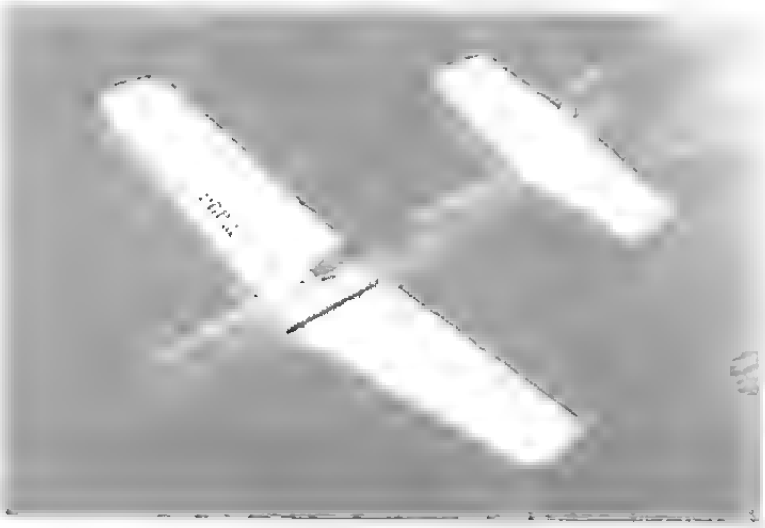
9

10

Arrow points forward

8

Whitewings



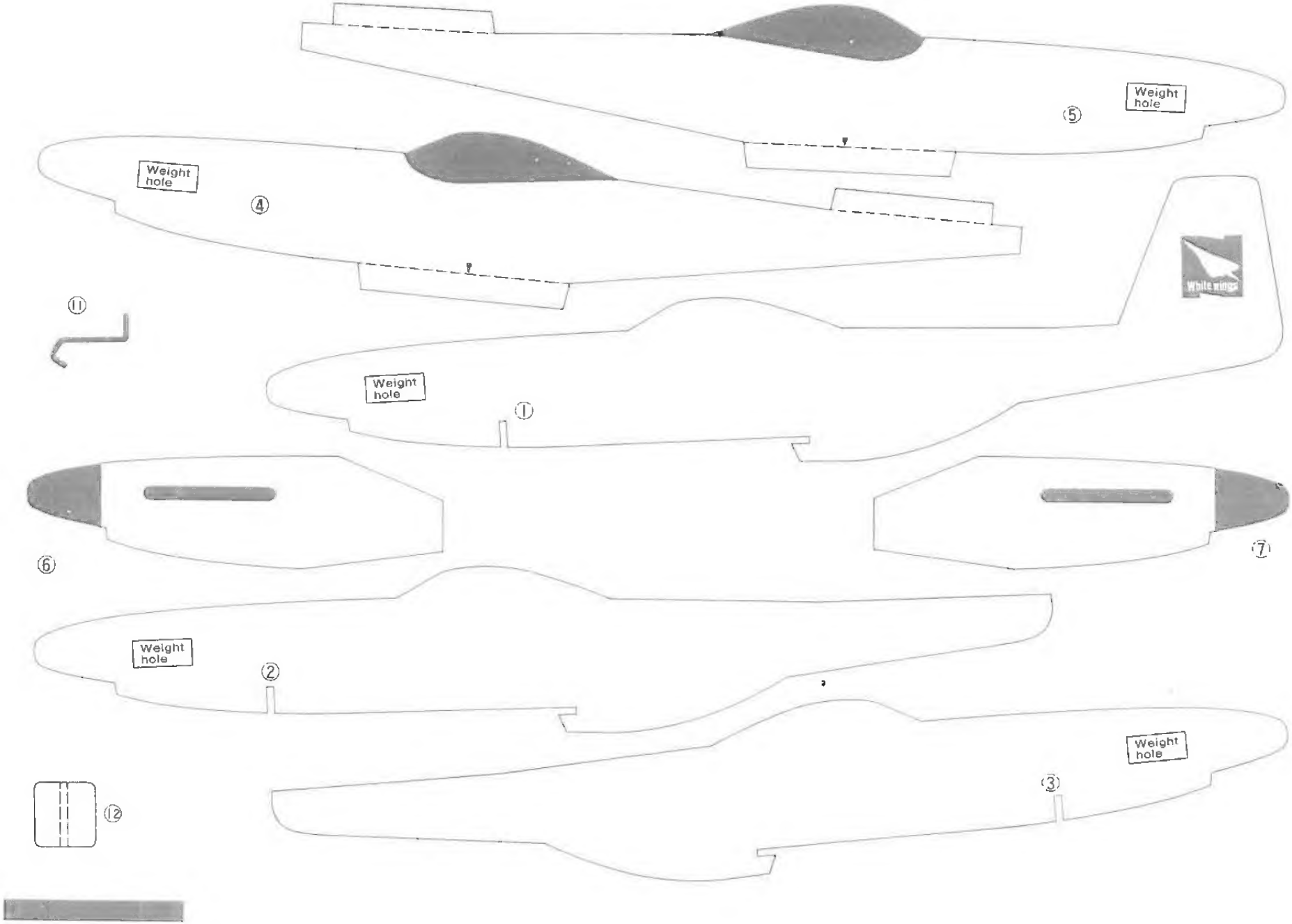
Whitewings®

P-51D MUSTANG

------ Fold with dashed line inside

↑ Arrows point forward

Bend-resistant direction


Weight hole
⑤
Weight hole
④
White wings
⑪
Weight hole
①
⑥
⑦
Weight hole
②
Weight hole
③
⑫

Make trim creases along the dashed lines.

Arrow Points forward.

Dihedral angle gauge

15° 15°

b Then fold up along the dashed line at a 90° angle. ⑦

a First cut out the - - - line.

c After folding, trim along the solid line.

⑥

Fold the tab along this dashed line.

Arrow points forward.

④

Arrow points forward.

⑤

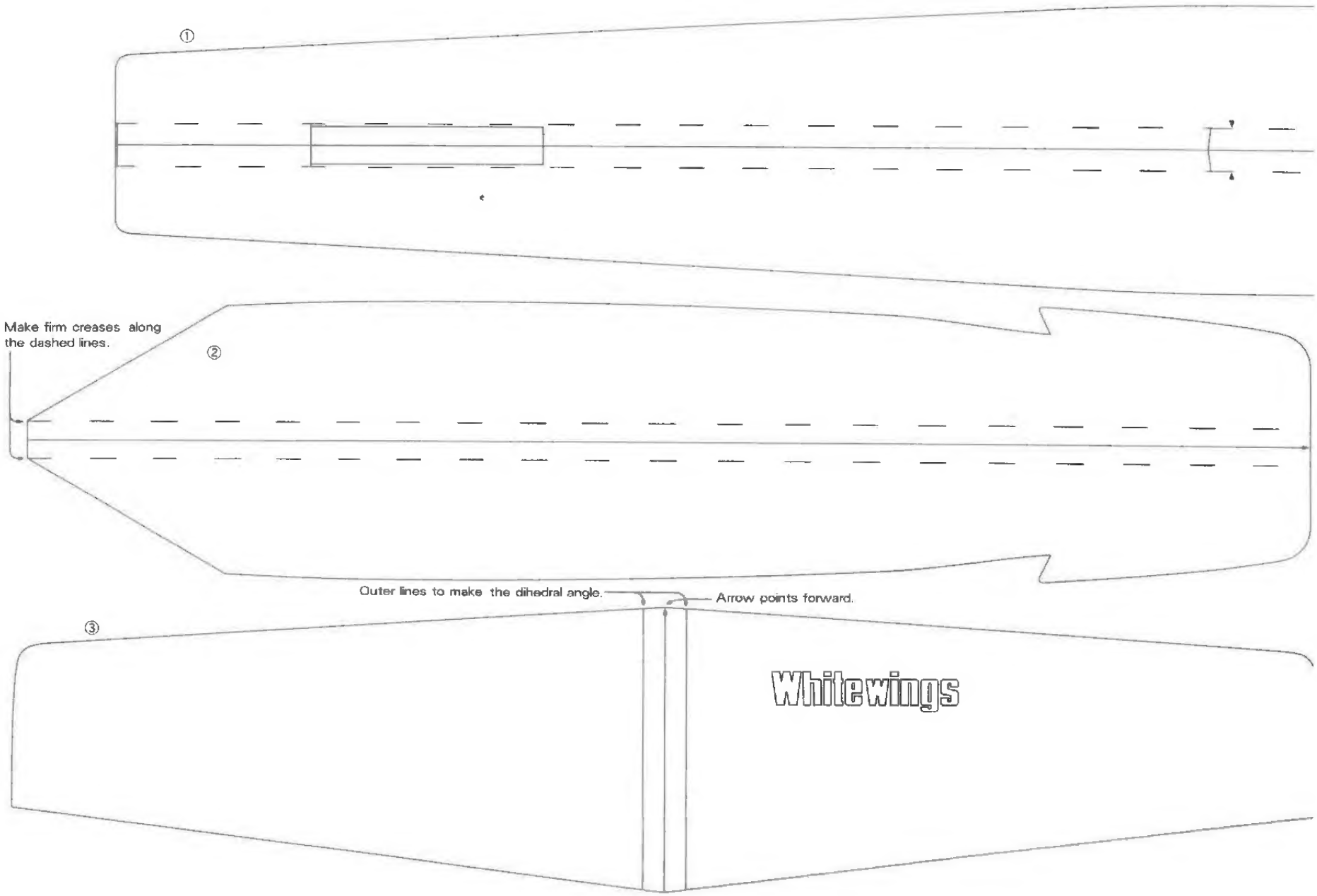
Whitewings®

TriLinear 702 RICKENBACKER

- - - - - Fold with dashed line inside.

1 Arrows point forward.

Bend-resistant direction


①
Make firm creases along the dashed lines.
②
Outer lines to make the dihedral angle.
Arrow points forward.
③
Whitewings